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ABSTRACT

Noting that a coherent financing system is critical to ensuring that investments in early care and education are effectively cultivated and allocated, and that there are a number of parallels between early care and education and higher education, this project examined the financial support strategies in higher education and their potential use in early care and education. The areas of inquiry were: (1) financial aid need analysis; (2) financial aid packaging and administration, including a model for community-based financial aid administration; (3) use of diverse forms of financial aid, including family loan programs; (4) use of diverse sources of revenue, focusing on the feasibility of using community early care and education endowment funds; and (5) approaches to institutional (program) support and pricing. Following an executive summary, the report examines the current situation in early care and education service delivery and then considers each of the above areas. The report concludes with a summary of the key features of the proposed early care and education financial aid system. Recommendations are made with regard to: (1) the financial aid system; (2) resource and referral; (3) fund development and distribution; (4) licensing and accreditation standards; (5) professional development; (6) data system; and (7) funding. Appended to the report is a list of project participants. (Contains 22 endnotes.) (KB)

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RESEARCH REPORT

Learning Between Systems:

Adapting Higher Education Financing Methods to Early Care and Education

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Teresa Vast • July 2001

ERRATA

In the "Endowments by function" box on Page 46, "Time Endowment" should be "*True* Endowment."

In the box on page 56, "The economic structure of a college: Global income, costs, prices, subsidies, and aid," the phrase "Aid Basics" should be "Aid *Basis*." And "Funded Researach" should be "Funded *Research*."

A project funded by the
David and Lucile Packard Foundation

Foreword

This research report is the product of several instances in which an idea and its progeny found receptive audiences and many benefited from the experiences. The core idea is that the methods and systems by which higher education is financed could be applied to financing early care and education in America. This idea generated a 1998 conference in Minnesota attended by experts in early care and education and specialists in college finance and student financial aid. Their discussions led to the conclusion that it would be worthwhile to conduct a detailed examination of specific features of higher education finance and test their applicability to early care and education. Another outcome was that Teresa Vast, who organized the Minnesota "think tank," met several persons who would eventually contribute to this project.

The David and Lucile Packard Foundation, which had provided financial support for the Minnesota conference, was receptive to the idea of funding the "detailed examination," in the form of a research project that Teresa Vast would direct. But Teresa needed an organization to help administer the project. Because they believed in the need to strengthen early care and education, Rose DiNapoli and Marianne Keler used their influence as board members to get the Sallie Mae Education Institute to administer the project. The Institute board agreed to let me work as the project supervisor and to let my staff support the project logistics.

We would soon need to bring the core idea and knowledge of the project to the attention of another group. When I left Sallie Mae and the Sallie Mae Education Institute for a position with the USA Group Foundation in Indianapolis, Bob Dickeson and Martha Lamkin at USA Group agreed to help me transfer the Packard Foundation grant and the research it supported to my new organization. They believed in the idea and thought the project would make a contribution to early care and education.

The idea continued to draw support as the project continued and as the participants from higher education learned new things about their system when they attempted to apply its methods to early care and education.

When the USA Group Foundation changed from a corporate foundation to a private one, its successor, Lumina Foundation for Education, saw the value of the project and continued to support it.

Thus the project went through three organizational homes before its conclusion. We believe that each of those homes added to the quality of the report that follows. We hope that the readers of this report agree that we reached our project goals — and that the original idea that sparked the project remains viable.

— Jerry S. Davis, June 2001

Acknowledgments

The efforts and talents of many individuals made the *Learning Between Systems* project possible. Their thoughtful contributions were important in shaping the questions we explored and the ideas and models we developed. Others cheered us on as we worked to design a framework and tools for creating a viable early care and education finance system. We appreciate the support and enthusiastic help we received from all quarters. We especially thank those who shared their time and expertise in various project activities, listed on Pages 63-65.

Several key individuals were particularly instrumental in the development and implementation of *Learning Between Systems*. Foremost among these is Jerry Davis, whose support and personal commitment helped to launch and sustain the project. I deeply appreciate his generous contribution of time and expertise to ensure the success of the project and the guidance he provided throughout.

The *Learning Between Systems* project sprung from the considerable enthusiasm generated at the 1998 Financial Aid Think Tank for adapting higher education finance methods to early care and education. Cathy Thomas of the University of Southern California first suggested that we convene a group to develop a need analysis methodology for early care and education; Sandy Baum of Skidmore College, Kathie Little of The College Board and Jerry Davis joined to conceptualize the project. All agreed to participate as the higher education cadre of the team. Melinda Green of the Black Child Development Institute and Michele Piel, formerly of Enterprise Child Care, joined us, bringing varied early care and education expertise to the mix.

Each member of this team contributed generously and significantly to the development of the methodology and application. I am also grateful to Diana Pearce of the University of Washington and Connie White from School and Student Service for Financial Aid. Each brought distinct expertise and unique perspectives to our discussions on different occasions. Sandy Lamm of The Child Care Group in Dallas, Texas, and Janet Singerman of Child Care Resources in Charlotte, N.C., shared valuable insights from the child care resource and referral field and helped us to conceptualize application-processing functions and community-based financial aid administration.

I especially thank Sandy Baum, Cathy Thomas and Kathie Little for the additional assistance they each provided — the many hours they spent in phone calls and e-mails in addition to our face-to-face meetings were key to the project's progress. Sandy Baum also provided essential technical

expertise and research in many critical phases of the work. I am grateful for her important contributions to the development of the *Early Care and Education Need Analysis Methodology* as well as to my own evolving understanding.

Technical reviewers lent their time and considerable expertise in reading drafts of our work. We thank them for insights and advice that helped to strengthen the methodology. Their participation, however, should not be construed as agreement with our recommendations. Numerous individuals helped us to test an application form and to gather parents together in focus groups to provide us with feedback. Our gratitude to each of them and to Fredda Merzon, who recruited, oriented and coordinated site coordinators and focus group facilitators for this effort in five states.

A special thank you to Dan Cheever, Jr., President of Simmons College, for his generous hospitality in hosting the *Cost, Subsidies, and Price* seminar in May 2000, and to Judy Littlejohn for her administrative assistance. Sandy Baum, Henry Morgan of Innovative Capital Partners and consultant Louise Stoney assisted in planning the seminar, and a dozen others participated, bringing new voices and perspectives to a complex and challenging topic. Many thanks to all who shared their spirit of adventure!

Thanks to consultant Kathleen Payea, who provided extensive technical support in testing of the methodology and application — often "beyond the call." Thanks also to Kathleen Short of the U.S. Census Bureau for her interest and efforts to help us explore options for constructing a geographic cost of living index.

I am thankful for overall guidance provided by the project's advisers: Joan Lombardi of The Children's Project, Anne Mitchell of Early Childhood Policy Research and Gwen Morgan of Wheelock College. Yasmina Vinci of the National Association of Child Care Resource and Referral Agencies also offered invaluable support.

At Lumina Foundation for Education, my gratitude to Bob Dickeson for welcoming the project; to Sara Murray-Plumer for her assistance with posting to the Web site; and to Pamela Griffin for overseeing many details with consistent care and patience. Thanks also to Cynthia Buchanan from Sallie Mae, who provided much helpful assistance in the project's early stages.

I am grateful to several people who contributed substantially to this report: Sandy Baum and Kathie Little for sections of the early care and education methodology summary; Jerry Davis for his loan research summary; Helen Monroe for her technical report on endowments, excerpted for this report; Sandy Baum for contributions to the cost, price and subsidies section and to the technical report on the need analysis methodology; Barbara Shore for editing; and Natasha Swingley for graphic design. Thanks to Sandy Baum, Anne Mitchell, Gwen Morgan, Kathie Reinhardt, Cathy Thomas and all others who reviewed earlier versions of portions of this report and provided insightful guidance for improvements. Any errors that remain are those of the authors.

My appreciation to all who have provided support, encouragement and ideas who are not otherwise named here. Your interest in our work is deeply appreciated. A special thanks in this regard to the national partners and site leaders of the Finance CIRCLE (*Communities Increasing Resources for Children's Learning Experiences*). On a personal note, I am particularly grateful for the love and support of my husband, Michael Kieran, and our daughter, Angela, throughout the long hours at the computer, on the phone and at meetings many thousands of miles away from home.

Finally, on behalf of the entire project team, I especially want to acknowledge the generous contribution of the David and Lucile Packard Foundation and of Marie Young, who has supported our efforts, believed in our abilities and saw the value in the direction of our research. We appreciate the considerable financial support of the Packard Foundation and the willingness to extend this support to a second year when we discovered that our original 12-month framework was too short for our agenda.

Teresa Vast
Kailua, Hawaii, June 2001

Available upon request:

Technical reports:
A Financial Aid Need Analysis Methodology for Early Care and Education
by Teresa Vast and Sandy Baum

Assessing the Feasibility of Family Loans for Early Care and Education
by Jerry S. Davis and Jill Wohlford

Community Endowment Funds for Early Care and Education
by Helen Monroe

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Executive summary

Background

Recent research has confirmed that high-quality early care and education programs lead to better developmental outcomes for young children. Studies have also demonstrated that high-quality early care and education results in a significant reduction in later expenditures for remediation, prisons and social welfare programs. Yet, millions of young children languish in poor-quality programs or have no access to early care and education services. There is no question that much greater investment is needed to ensure all American children equitable access to high-quality early care and education. But money alone will not accomplish this goal. A coherent financing system is critical to ensuring that investments in early care and education are effectively cultivated and allocated.

The project described in this report, *Learning Between Systems: Adapting Higher Education Financing Methods to Early Care and Education*, was undertaken to contribute practical methods and a cohesive finance framework as a foundation for an early care and education system. A generous two-year grant from the David and Lucile Packard Foundation made it possible, along with sponsorship from the Sallie Mae Education Institute and Lumina Foundation for Education (formerly USA Group Foundation).

Why adapt methods from higher education? A number of intriguing parallels between the two fields prompted the inquiry. For example, while both college and early care and education have been shown to produce significant personal and social benefits, neither is an entitlement, as public K-12 education is. Despite the fact that higher education has its own continuing challenges to secure funding and ensure access, the features and achievements that distinguish it suggested possible solutions for early care and education. History shows, for example, that in a matter of decades, educational opportunity was dramatically expanded through a combination of funding to colleges and aid to individual students. Thus, in shaping a viable early care and education system, it made sense to look to higher education for ideas, keeping in mind that we can learn from that system's mistakes as well as from its accomplishments.

In shaping a viable system, it made sense to look to higher education for ideas.

The project's areas of inquiry into higher education strategies and our major objectives were as follows:

- *Financial aid need analysis:* To develop a need analysis methodology and application for use in determining families' ability to pay for early care and education and their need for aid.
- *Financial aid packaging and administration:* To design application-processing methods and a model for community-based financial aid administration.
- *Use of diverse forms of financial aid:* To determine the feasibility and design features of family loan programs as a potential form of financial aid.
- *Use of diverse sources of revenue:* To determine the feasibility of community early care and education endowment funds as a potential source of revenue for financial aid and support to early care and education programs.
- *Approaches to institutional (program) support and pricing:* To investigate methods that colleges use in determining full cost and establishing a tuition price and to identify strategies with potential for adaptation by early care and education programs.

What is the current situation in early care and education service delivery?

No organized system exists to funnel resources effectively to programs and families to meet children's developmental and educational needs. Families face a confusing array of services when seeking a safe, nurturing place for their children to play and learn during the years before they enter kindergarten. Most parents need to work to support their families, and many depend on early care and education services as an essential support. When families seek help to pay for this expense, they are often confronted with conflicting eligibility criteria and multiple application processes.

Financial assistance is limited both in scale and scope, and there is no uniform method for assessing families' eligibility and need for aid. As a result, agencies perform duplicative functions and some families pay less for early care and education than they can afford while many others pay more than they can reasonably contribute.

Not only do many families need help paying for high-quality early care and education, but early care and education providers also need considerable resources to provide it. Program quality cannot be achieved or maintained without staff who are qualified by education and training. And without adequate salaries to attract and retain a skilled work force, programs are frequently unable to provide the quality of services children need.

Public funding is not generally available as direct support to programs. Consequently, the greatest portion of early care and education revenue is from tuition and fees, including payments made by families and financial aid paid in their behalf. This revenue is inadequate to provide the high-quality services that promote children's development and boost their chances at success in school and beyond.

In the absence of sufficient revenue, early care and education providers rely on in-kind support to produce their services. By far the most significant of these "hidden subsidies" is the value of employee labor that exceeds the low level of financial compensation. The market value of these in-kind subsidies is rarely calculated as part of the cost, however. Instead, the subsidies are generally passed along to all enrolled children without regard to their families' financial need, through a lower-than-full-cost price.

The result of inadequate staff compensation is high turnover that leads to replacements by less qualified staff. Ultimately, the result is poorer-quality programs that are more likely to pose harm than meet children's developmental needs. To attract and retain a skilled work force, reliance on labor subsidies must be replaced with substantial new revenue to early care and education programs.

What can be learned and adapted from higher education finance strategies?

Need analysis methodology and application.

Distribution of need-based financial aid for higher education relies on standardized need analysis methodologies and use of the same application forms nationwide. The methodologies measure each family's ability to pay for college and the student's need for aid in relation to college attendance expenses. The amount each family is expected to contribute depends on family size, income, assets, number in college and other factors. Basic allowances for taxes, savings and a modest living allowance are applied to family income and assets to arrive at the *expected family contribution*. Those with fewer resources qualify for more aid; those with greater discretionary resources are asked to pay proportionately more, up to the full price of college attendance.

The use of standard methods could result in multiple benefits for early care and education, with improvements for families, providers and in overall system effectiveness. The *Learning Between Systems* project studied higher education methods and then developed a need analysis methodology and application form for use in fairly assessing what each family, based on its financial circumstances, can reasonably be expected to pay for early care and education. Prior to adoption, the proposed *Early Care and Education Need Analysis Methodology* requires field-testing. It should also be reviewed periodically and updated annually to maintain its sound economic foundation. The goal is for it to evolve as a "consensus methodology" that benefits from input of those using it with families, as well as from economists and national financial aid experts.

Application processing and community-based financial aid administration

The college financial aid office provides outreach, information, financial aid counseling and assistance to students of diverse family backgrounds and economic status. Applications for financial aid are submitted to a central processing agency for determination of the expected family contribution. College financial aid staff verify the application information supplied by students and their parents, and then assess families' need for aid based on their expected family contribution and college attendance expenses. They package various types of aid from different sources according to eligibility criteria and availability of funds.

A community intermediary structure would be needed to serve as a "hub" of an early care and education financial aid delivery system. This community hub would assist applicants, package aid and make aid award payments in their behalf to providers that meet the standards for participation in the system. The *Learning Between Systems* project identified core functions that would be essential for agencies responsible for the delivery of early care and education financial aid, and outlined a framework for working with programs and families. In addition to these "broad brush" recommendations, a centralized Web-based system for processing financial aid applications is suggested for an early care and education financial aid system.

Policy-makers and early care and education leaders wishing to take next steps in preparation for a coordinated finance system could start by exploring the implications of these recommendations within the context of specific communities. Potential outcomes, even with limited funds for financial aid, include efficiencies in the early care and education financial aid delivery system, quality improvements and greater equity and access for young children and their families.

Assessing the feasibility of loans as a new type of early care and education financial aid

Public and private loan programs that offer long-term, low-interest loans to pay for tuition and other expenses are a primary feature of financing college education. More than half of all full-time students at four-year colleges use student loans to meet expenses and about one in 16 dependent students' parents use loans to help pay the bills. Student and parent loans make it possible to afford

attendance because they stretch education payments over extended periods of time and allow borrowers to pay for current expenses with future earnings.

The *Learning Between Systems* project investigated the feasibility of loans by holding focus groups with parents and by analyzing census data on incomes and characteristics of families with young children. The focus groups revealed parents' lack of awareness about the potential long-term value of early care and education for their children and a strong aversion to the idea of borrowing to pay for it. Moreover, the census data suggest that using long-term, low-interest loans to help pay for early care and education represents a viable strategy for a very limited number of middle- and upper-middle-income families.

Loans to help pay for early care and education represent a viable strategy for a very limited number of middle- and upper-middle-income families.

Nonetheless, a well-targeted loan program could help some families pay for high-quality early care and education during the years that early care and education expenses exceed families' ability to pay, allowing loan repayment and college savings to begin during the elementary school years when child care expenses generally decrease. The most cost-effective way to administer the loans, if such a program were implemented, would be to modify current higher education loan programs to allow borrowing for early care and education. The ultimate feasibility of such loans, however, may rest on parents' perceptions of the value of early care and education and their willingness to invest in it.

Assessing the feasibility of community endowment funds as a new source of revenue

Endowment funds managed by higher education institutions provide revenue for both program support and financial aid. The bulk of endowment assets are concentrated in just a small fraction of all institutions, but even schools with small endowments benefit from having this additional source of revenue.

The *Learning Between Systems* project investigated the feasibility of establishing community endowment funds as a long-term strategy for generating revenue for early care and education. An endowment specialist engaged by the project compiled background information about endowment funds, steps for community leaders to take in assessing feasibility and establishing realistic revenue goals, and considerations for how such a fund could be held and managed.

It appears that endowment funds may hold potential for providing a new revenue stream for early care and education. How early care and education organizes itself to establish endowment funds would be critical to success in this arena. Careful planning and testing would help leaders develop reasonable expectations about the role such funds could play in their community. As part of the effort, it will be important to explore different endowment models and compare endowment-building strategies.

A unique model suited for a coordinated early care and education system would involve a community foundation that holds the endowment and provides annual earnings to a community's designated early care and education "hub" organization to distribute as financial aid to families and as support for early care and education programs. This and other ideas for endowments deserve exploration so that Americans will have clear and compelling options for making gifts to early care and education that can produce enduring benefits.

Approaches to allocating subsidies and establishing prices

Non-tuition revenue from various public and private sources offsets the operating costs of colleges and universities, effectively lowering the

amount that needs to be collected in tuition and fees. The difference between the price paid by students and the actual average cost of education constitutes a subsidy. Institutions allocate the subsidies in two forms: (1) a general subsidy used to lower the price of education to all students and (2) price discounts or aid to reduce the price for individual students. These subsidies are in addition to any financial aid that is collected in tuition and fees, such as grants, loans and work-study funds provided to individual students by the federal and state governments.

A critical factor in college pricing is the existence of a financial aid system that is capable of equitably assessing families' ability to pay. This system enables many institutions to set a tuition price independently of perceptions of affordability because it is well known that students (and their families) can apply for financial assistance and receive need-based aid. The tuition price is often a starting point for offering need-based financial aid and other tuition discounts.

Higher education and early care and education share several finance characteristics. Neither is fully supported by public funds and, in most cases, families are expected to help pay for the service. Both are provided under a variety of public and private auspices. The price charged to consumers is less than the full cost. Tuition and fees are supplemented by revenue (or in-kind support) from other sources. Finally, all enrolled students or children receive a subsidy, regardless of financial need.

The *Learning Between Systems* project investigated how higher education approaches to cost, price and subsidies might be applied to early care and education finance, and developed ideas for adaptation. In sum, higher education strategies suggest a framework that could prove useful in early care and education. Adaptation, however, would require extensive changes, including: cultivation of additional durable sources of non-tuition revenue; moving from staff-subsidized tuition prices to prices that reflect full cost; use of a sound financial aid method and delivery system; and provision of training for early care and education program administrators in the areas of finance, economics, cost and break-even analysis.

Another factor bears consideration: While the nation values higher education, it does not yet fully value early care and education. As a result, parents may not be willing to pay a higher price, even if they are able. Stepped-up efforts are needed to increase parents' awareness of the benefits of high-quality early care and education. Moreover, parents and policy-makers need a better understanding of the costs of producing high-quality early care and education.

Recommendations

We hope our efforts to adapt higher education finance methods for early care and education will contribute to the creation of a viable early care and education finance system. While components of a proposed early care and education financial aid system have been the primary focus of the *Learning Between Systems* project, we recognize that a financial aid system is not in itself a solution to the quality and financing crisis that plagues early care and education. It must operate within the larger context of coordinated early care and education services with adequate funding and essential infrastructure supports. Our recommendations for key infrastructure components and supports needed in a coherent early care and education system are summarized below.

We urge early care and education advocates and leaders to work together with federal, state and local policy-makers to create an early care and education system that can deliver the American promise of equal opportunity to our nation's young children. That promise includes ensuring that each child has a good start in life through equitable access to high-quality early care and education.

Key infrastructure components and essential supports for an Early Care and Education (ECE) system

Financial aid system

- ☐ Need analysis methodology, standard application form and processing mechanism.
- ☐ Community-based financial aid agency.
- ☐ Funding standards for ECE programs.

Resource and referral

- ☐ Child care resource and referral services (could be co-located with financial aid agency).

Standards: Licensing and accreditation

- ☐ Licensing standards for all ECE programs.
- ☐ Education and training requirements for ECE practitioners and administrators and/or individual practitioner licenses.
- ☐ Standards for ECE accrediting bodies.

Professional development

- ☐ State and national career development systems.
- ☐ Training for ECE program administrators on economics and finance; director credentials that require financial management training; adoption of common ECE finance terminology.

Fund development and distribution

- ☐ Community or regional development offices (could be co-located with financial aid agency).

Data system

- ☐ Infrastructure for data collection and analysis.
- ☐ National data system of ECE statistics on finance and other key characteristics.

Funding

- ☐ Sufficient need-based funding to help families pay for high-quality ECE
- ☐ Direct support to ECE programs to assist them in meeting and adhering to quality criteria.
- ☐ Infrastructure support for a coordinated ECE system, including:
  - Centralized processing of a free common financial aid application.
  - Career development opportunities.
  - Program accreditation.
  - Development of a national data system on ECE finance.

Introduction

Background

A severe and persistent crisis in the quality and financing of early care and education services for young children has spurred leaders from the early childhood field to seek innovative approaches to making high-quality programs accessible for all American children.

Research has demonstrated that high-quality early care and education programs not only lead to better developmental outcomes for young children, but to a significant reduction in later expenditures for remediation, prisons and social welfare programs.[1] Yet, due to under-investment in early care and education and its work force, millions of young children languish in poor-quality programs or have no access to early care and education services. Moreover, recent scientific discoveries suggest that early development is so critical that a failure to address the condition of early care and education — including its quality and accessibility — could have serious consequences for the nation's future.[2]

There is no question that much greater investment is needed to ensure all American children equitable access to high-quality early care and education. But money alone will not accomplish this goal. A coherent financing system is critical to ensuring that investments in early care and education are effectively distributed. It is clearly time to take bold action to correct past systemic failures and create a sustainable approach to ensuring young children's health, safety, development and access to educational opportunities.

Failure to address the condition of early care and education could have serious consequences for the nation's future.

The project described in this report, *Learning Between Systems: Adapting Higher Education Financing Methods to Early Care and Education*, was undertaken to contribute practical methods and a cohesive finance framework as a foundation for an early care and education system. The report does not directly address the question of how much funding is needed, nor does it suggest who should pay what share of the total cost of high-quality early care and education. Rather, it presents ideas for designing a finance infrastructure that, with sufficient resources, could enable programs to deliver high-quality services and equitably compensate their work force and make financial assistance available to parents who cannot pay the full price of high-quality early care and education services.

Why adapt methods from higher education?

Learning Between Systems: Adapting Higher Education Financing Methods to Early Care and Education is a direct outgrowth of a "think tank" convened in 1998 to consider the potential application of higher education financing strategies to solve the financing crisis in early care and education.[3] A number of intriguing parallels between early care and education and higher education prompted the exploratory meeting:

- Participation in high-quality early education, like higher education, can produce significant personal and social benefits.
- Neither college nor early care and education programs are entitlements; both rely on families to pay a share of the cost.
- In both, services are delivered by a diversity of providers — public, private non-profit, proprietary, church-sponsored.
- The prices of college and early care and education are more than most families can afford.
- Choice, access, quality and equity are strongly held values in both early care and education and higher education.

Several features that distinguish higher education suggested possible solutions to the quality and financing crises in early care and education:

- To receive public funds and to participate in student aid programs, colleges must be accredited by a federally approved accrediting body.
- While early care and education programs rely primarily on tuition and fees, colleges depend on multiple revenue sources. This helps meet the "full cost" of operations, including adequate faculty compensation.
- Tuition prices reflect the amount needed, along with other revenue, to operate an accredited program. Families that are able to pay the full price do; student aid helps others pay it.
- While there is no consistent method used to measure ability to pay for early care and education, standard application forms and methodologies are used to determine a family's ability to pay for college.
- The financial aid office is a one-stop shop for all types and sources of assistance. There is no stigma attached to seeking aid, and families of all income levels follow the same process.
- Varied types and sources of financial aid are "packaged" for each student to narrow the gap between what the family can pay and the price of the college. The sources, types and amount of aid available to families with young children are far more limited.

Together, the various higher education strategies suggested a potential framework for financing early care and education. While it was noted that higher education faces its own continuing challenges, it was agreed that early care and education has a distinct advantage: We can learn from that system's mistakes as well as from its achievements in shaping a system that will work for America's families.

Learning Between Systems was designed to pursue several compelling reasons to investigate the adaptability of higher education financing methods for an early care and education system. A generous two-year grant from the David and Lucile Packard Foundation and sponsorship from higher education research organizations — Sallie Mae Education Institute and Lumina Foundation for Education (formerly USA Group Foundation) — made it possible. This report describes our areas of inquiry, shares what we have discovered and developed and suggests ways to apply what has been learned.

Project objectives

The project's overall goal was to identify the approaches and key lessons that, if adapted appropriately, could contribute to national efforts

to design and implement a fully functional finance system for early care and education. To this end, *Learning Between Systems* focused on the higher education financing strategies considered to be particularly applicable to an early care and education system. The areas of inquiry and the project's major objectives were as follows:

- *Financial aid need analysis:* To develop a need analysis methodology and application for use in determining families' ability to pay for early care and education and need for aid.
- *Financial aid packaging and administration:* To design application-processing methods and a model for community-based financial aid administration.
- *Use of diverse forms of financial aid:* To determine the feasibility and design features of family loan programs as a potential form of financial aid.
- *Use of diverse sources of revenue:* To determine the feasibility of community early care and education endowment funds as a potential source of revenue for financial aid and support to early care and education programs.
- *Approaches to institutional (program) support and pricing:* To investigate methods that colleges use in determining full cost and establishing a tuition price and to identify strategies with potential for adaptation by early care and education programs.

For readers who seek additional information, technical reports are available on three of the project topics: need analysis methodology, family loans and community-based endowment funds.

What is higher education?
In this report, higher education refers to two- and four-year degree-granting postsecondary institutions. There are several classifications of higher education institutions, but for purposes of simplicity, we use the terms "higher education" and "colleges and universities" often interchangeably with "colleges" or "schools."

What is early care and education (ECE)?
In this report, early care and education (ECE) refers to any part-or full-day program offered for children from birth through age five that is organized to meet the developmental needs of young children, whether labeled as child care, early education, preschool, nursery school, day care, child development center, family child care, Head Start or similar terminology.

What about programs for school-age children?
We recognize that older children need high-quality programs during their out-of-school time. An early care and education financing system that is responsive to the needs of families must address their need for help in finding and paying for out-of-school time programs for their school-age children as well as early care and education programs for their youngest children. Indeed, some current sources of funds address care for children throughout this age span, approximately ages 0-12. Families are best served by a single point of entry and a common application form and method when seeking assistance, whether for early care and education or out-of-school-time programs or both. With this in mind, we designed a need analysis methodology and delivery system, both of which are described in this report, that include assisting families with school-age children. For the sake of simplicity, however, we primarily refer to early care and education throughout this report.

Methods

The approaches used to pursue the five major objectives varied considerably. Project activities and methods for each objective are described below. The many individuals who participated in the activities and others who contributed to the project are noted on Pages 63-65.

Objective 1: Develop a need analysis methodology and application for use in determining families' ability to pay for early care and education and need for aid.

A project team was assembled to conceptualize the methodology and draft an application form. Expertise among the seven members of the core team was varied, including backgrounds in higher education financial aid policy and practice as well as early care and education policy and financial assistance. Over the course of the project, consultants brought additional policy perspectives to the table as well.

Need Analysis Methodology. The team began by developing a set of principles to guide our decision-making about the early care and education methodology. We examined principles of need analysis that have been at the center of financial aid administrative practice for decades, then revised these to reflect relevant differences between early care and education and higher education. The same process guided a comprehensive review of the two major higher education need analysis methods, the Federal Methodology and the Institutional Methodology. We considered how the circumstances of families with young children differ from those with college-age children, scrutinizing each formula and rationale to determine where changes were warranted.

Between meetings, research focused on data sources and modifications needed to test our ideas and assumptions, formula by formula. We experimented with alternative formulas, assumptions and parameters to simulate results for a range of family sizes and compositions, each with different levels of income and assets. A cadre of reviewers from both higher education and early care and education provided critical input on three drafts of the method, helping us refine, strengthen and clarify the emerging methodology. Extensive additional research culminated in a final draft.

Financial Aid Application. The team also developed an application form to collect the data needed for the analysis, adapting applicable features from college and independent school financial aid applications and applications used in child care subsidy programs. The application also reflects suggestions made by the reviewers, including child care subsidy program managers.

The draft form was then tested with more than 100 families from rural, suburban and urban communities in five states, with the assistance of child care resource and referral agencies that recruited parents of diverse backgrounds as participants.

Field-testing helped to assess the efficacy of the method being developed and to test the form itself. Analyses of the completed applications, surveys and focus-group comments led to refinements of both the method and the application. The final draft application form reflects these changes as well as the most recent revisions to the methodology.

Both the methodology and the application will require additional field-testing prior to adoption.

Objective 2: Design application-processing methods and a model for community-based financial aid administration.

Child care resource and referral (CCR&R) leaders with expertise in voucher management joined the project's core team for discussions on application processing and community-based financial aid administration. CCR&R

agencies often serve as key hubs for early care and education resources in communities — both for families and providers. Since many CCR&R agencies also manage subsidies/vouchers through state contracts, we sought to apply lessons learned from their experience to our design efforts. To explore the relevant issues, we held meetings and conference calls and together reviewed materials and documents from child care subsidy programs, CCR&R agencies and college financial aid offices.

Objective 3: Design family loan programs as a potential form of financing to help families pay for early care and education.

Two sets of activities were pursued in studying the feasibility of loans to help middle-income families pay for early care and education. One involved conducting focus groups with parents of children in early care and education to gauge interest in potential early care and education loan programs and identify ways in which loan programs could be shaped to meet families' needs. The second set of activities involved analyzing U.S. Census Bureau data on incomes and characteristics of families with young children to determine how much they might reasonably afford to borrow under various circumstances.

Potential loan program designs were then considered, and estimates were developed to examine what types and sizes of loans might be of interest to parents. Finally, the feasibility of early care and education loans from the perspective of possible lenders was explored.

Objective 4: Determine feasibility and design features of community early care and education endowment funds to provide program support and financial aid.

Endowment Development Institute, a California-based firm, was engaged to do three things: (1) assess the feasibility of establishing community endowment funds to generate revenue for early care and education program support and financial aid for families; (2) identify design elements to be included in a community early care and education endowment fund; and (3) recommend next steps.

Objective 5: Investigate higher education methods of determining full cost and establishing a tuition price. Identify strategies with potential for adaptation by early care and education programs.

Two activities informed our thinking about how higher education approaches to cost, price and subsidies might be applied to early care and education finance. The first was a review of current policy literature on cost, price and subsidies in higher education. The second was an invitational seminar — *Exploring Cost, Subsidies, and Price: What Can Early Care and Education Learn from Higher Education?*— held at Simmons College in Boston in May 2000.

The seminar's purpose was twofold: to familiarize a group of early care and education administrators with approaches to the cost-subsidy-price-aid equation used by their college counterparts and to explore the potential relevance of these approaches to early care and education through conversations with higher education and early care and education finance experts. To achieve this, selected readings on both higher education and early care and education finance were provided to the 16 participants prior to the seminar, and brief overviews of each field were also presented at its start. The resulting dialogue sparked some new insights, highlighted parallels between the fields, and underscored the important differences that particularly constrain early care and education.

Drawing from both of these activities, we summarized key higher education finance issues that suggest some lessons for early care and education.

Features of early care and education services and finance

Financial assistance directed to families to purchase early care and education services and funding directed to programs to produce the services are essential supports that affect the availability, quality, and accessibility of early care and education programs. In this section, we briefly describe the current patchwork of early care and education services as a point of reference for our discussion of higher education finance strategies. Starting with an overview of direct early care and education services to children, we then highlight the characteristics that relate specifically to our areas of inquiry in higher education finance: financial aid applications, need analysis methodology and administration; diverse sources and forms of financial aid; and program revenues, costs, subsidies and prices.

No organized system exists to funnel resources effectively to programs and families.

In brief, no organized system exists to funnel resources effectively to programs and families to meet children's developmental and educational needs. Families face a confusing array of services when seeking a safe, nurturing place for their children to play and learn during the years before they enter kindergarten. Most parents need to work to support their families, and many depend on early care and education services as an essential support. When families seek help to pay for this expense, they are often confronted with conflicting eligibility criteria and multiple application processes. Only a fraction of these families receive assistance to pay for early care and education. Moreover, programs rely primarily on the tuition and fees they receive for services. This revenue is rarely adequate to provide the high-quality services that promote children's development and boost their chances at success in school and beyond.

Overview of early care and education programs

Types of services and usage. Early care and education services occur within a diverse mix of settings, providers and auspices. Approximately 13 million children from birth through age 5 — 60 percent of all children not yet in kindergarten — receive some form of non-parental early care and education at least part-time. Of these, more than 90 percent — nearly 10 million children — are estimated to participate in "market-based" early care and education provided in family child care homes or in centers located in churches, schools or independently operated facilities. Others receive care from relatives, friends and neighbors. Only a small percentage receive paid care in their own homes from a non-relative such as a nanny. While children under age 2 are more often in home-based arrangements, children 3 to 5 years old are more likely to be in centers.[4]

Centers. There are approximately 112,000 licensed center-based programs that each enroll an average of 50 to 90 children.[5] These include nonprofit centers, publicly sponsored centers and for-profit centers. The total number is much larger because many states exempt programs from regulation on the basis of their sponsorship, affiliation or some other characteristic. Divergent state regulations, as well as incompatibility and other shortcomings of available data make it difficult to accurately describe the early care and education landscape. The most current estimates suggest that nonprofit centers constitute the largest sector at 53 percent, including 15 percent church-sponsored centers. For-profit programs account for 39 percent of the market, and public-sector programs operated by public schools and agencies constitute about 8 percent.[6] Approximately 63

percent of children under age six in non-relative early care and education are enrolled in centers.[7]

Family child care homes. About 29 percent of children who receive early care and education from non-relatives are in family child care homes.[8] Approximately 305,000 regulated family child care homes — usually sole proprietorships — serve three to six children; about 12 percent are licensed to serve up to 12 children.[9] Many states do not regulate these child care businesses. In fact, a 1990 estimate suggests there could be an additional 1 million unlicensed programs in homes.[10]

Quality assurance. State regulation of early care and education facilities is intended to provide basic consumer protection against harm, but not all settings are covered by statute. Moreover, the standards differ dramatically by state. Licensing rules, together with other state and local regulations, constitute minimum standards that typically address health and safety, injury prevention and sanitation. Generally, they delineate group sizes, adult-to-child ratios, program activities and staff qualifications believed necessary to prevent harm and developmental impairment. Some states issue rated licenses to recognize programs whose standards exceed the baseline requirements.

Accreditation is a voluntary, peer-review process that programs undergo to distinguish themselves as meeting a higher standard of professional practice. Less than 8 percent of licensed centers and only a small fraction of family child care homes have achieved this recognition. Accreditation standards address dimensions of high-quality programs and professional practices that focus on the child's experience, such as the quality of interactions and the appropriateness of the curriculum, as well as on the underlying program structure: staff-to-child ratios, group size, staff qualifications, program administration and other measures.

Funding standards, such as those Head Start programs must follow, are used to assure a level of quality in early care and education programs that will meet the funder's objectives. While government has not used this mechanism consistently to protect young children receiving publicly funded services, more than half of the states now pay a higher rate for children who receive state subsidies and enroll in programs that are accredited or otherwise meet higher quality standards.

Key dimensions of quality in ECE programs

- Sensitive and responsive interactions between staff and children: emotional support, verbal and cognitive stimulation.
- High staff-to-child ratios.
- Small group sizes.
- Staff qualified by education and specialized training.
- Low staff turnover and higher levels of compensation.
- Stable administration.

Key components of quality addressed in these three different types of standards have an impact on costs. Adherence to quality standards costs more, but yields better developmental outcomes for children. The opposite is also true: Poor-quality programs can harm children.[11]

Information for parents

Parents often lack knowledge about how young children learn and grow, the importance of early development and the critical role that high-quality early care and education can play. National and local media campaigns and outreach efforts have been launched in recent years to increase parents' awareness and understanding in these areas. Increasingly, community agencies are providing parents with indicators and checklists to help them assess early care and education settings. Yet most parents lack access to other consumer supports that would help families make wise choices. For example, uneven regulation places the burden of judgment on parents who, not being experts in child development, are frequently

unable to distinguish lower from higher quality. Independent quality ratings of early care and education programs have only rarely been available.

Many parents lack awareness of financial assistance for which they may be eligible and, believing they cannot afford it, do not seek out early care and education that could benefit their children. Others settle for a less expensive, lower-quality arrangement.

Sources, types and purposes of financial aid for families

Financial support to help families obtain early care and education services is limited both in scale and scope. Most assistance is provided on the basis of financial need — some in the form of financial aid (subsidies or vouchers to purchase services) and some in the form of free services (an implicit rather than explicit provision of financial support).

Financial aid. Government-funded financial aid for early care and education is available to only a fraction of the families who could use help, both because eligibility requirements are stringent and because available funds fail to adequately assist all who qualify. The largest source of federal child care funds is designed to help low-income working families and those transitioning from welfare purchase early care and education. Even with the required supplement of state funds, this program helps only 12 percent of eligible families.[12] Smaller pots of funding are provided by various federal agencies, with differing eligibility criteria. State and local governments allocate their own funds for early care and education to varying degrees; some offer extensive aid, while others provide none.

These sources of financial aid are largely "portable" in that the aid helps to purchase services from providers chosen by families. In some areas, portability of aid is limited because the subsidies for early care and education services are available only at programs with a contract to provide the services to eligible families.

In some communities, business and philanthropic contributions also play a small role in helping some families pay for early care and education. For example, some employers offer child care at the workplace and may support a sliding-fee policy, while others assist employees by issuing vouchers for purchasing early care and education of their own choice.

Free services (implicit financial aid). Other need-based aid is available in the form of free or reduced-price services. For example, the Head Start program is provided free to families with incomes below the poverty level. As it is currently funded, Head Start serves about 60 percent of eligible 3- and 4-year old children.[13] Head Start funds are not portable; that is, they do not "follow the child" to a program of the family's choice. Some states provide free preschool or pre-kindergarten programs according to financial need, although most states make the free services available based on other criteria, such as potential risk of academic failure. Families enroll their children in participating programs designated by the state or local school district.

Purposes. The purposes of early care and education funding streams also differ. Some assistance is aimed at providing child care to enable parents to work. Eligibility depends on the parents' work status as well as their financial resources. Other assistance is intended to promote child development and education (e.g., Head Start and pre-kindergarten). Such funding distinctions can be obstacles to ensuring that all children receive the high-quality care and educational experiences they need to thrive.

The differing purposes are also reflected in the use of funding standards. For example, funding for Head Start, children with disabilities and some pre-kindergarten programs is contingent on adherence to standards designed to assure quality. In contrast, programs that have "child care" as their primary purpose are not required to meet national quality standards. The different purposes of the

funds reflect the way that eligibility is determined and financial assistance is administered.

Financial aid administration.

States administer federal child care funds either directly through their own agencies, by allocating the funds to counties to administer or by contracting with private entities to distribute the funds according to the state's criteria. Other funding for early care and education from various federal agencies is usually administered through separate state or local agencies or the public schools.

Head Start funds are a notable exception. The federal government bypasses state and local governments, contracting directly with local grantee agencies. These organizations have full responsibility for eligibility determination and service delivery. Likewise, private funds for child care tuition assistance, where available, are often administered separately by charitable groups or preschools that raise their own scholarship funds. With so many aid sources that are managed separately, it is difficult to determine if funds are being used effectively to address families' needs.

Determination of eligibility and need. In its distribution of funds for child care, the federal government relies on states to devise their own methods for measuring family income and determining eligibility. In most communities, there is neither a common application form nor a uniform method to determine eligibility and assess need for financial aid. If funds with the same or similar purposes are administered by multiple agencies, each may have its own separate application and differing requirements, obliging personnel in each agency to process the forms through independent systems.

Consequently, staff in different agencies perform duplicative functions, and families often must complete several application forms for different sources and types of aid (e.g., federal/state child care subsidies, Head Start, state prekindergarten, county or city child care subsidies, employer voucher programs, philanthropic funds from local charities or foundations and tuition aid administered by early care and education providers). The same family's income could be counted differently, depending on the particular calculation and processing methods required by the funding source or devised by the administering agencies. As a result, eligibility and need for aid may be determined quite differently for funds that have generally similar purposes.

Moreover, there is no assurance that funds are reaching their intended target populations or if they are being distributed fairly and equitably among those who qualify for assistance. In the absence of a uniform methodology for determining ability to pay, some families pay less for early care and education than they can afford. Many others are expected to pay more than they can reasonably contribute.

Conflicting requirements of different funding policies can interrupt the consistent provision of services. In many states, when eligibility changes because the child is in a different age bracket or because a parent changes jobs or accepts a promotion, the service is terminated, and the family may have to wait a long time to be determined eligible for a different funding source. These policies can result in children being moved from program to program, even in the same day, rather than moving the funds.

Eligibility period. Where the purpose of funding is primarily "education," such as with Head Start, policies allow children to remain eligible for the program year. In contrast, funds with "child care" as the main purpose are more likely to certify eligibility for shorter periods or require reapplication, although states have considerable discretion in setting eligibility periods for federal child care funds. Differing eligibility periods present significant challenges in packaging (combining) aid from different sources. In fact, recent federal guidance to states addresses this by encouraging minimum eligibility periods of a year to facilitate supporting children enrolled in Head

Start, pre-kindergarten and other program with longer eligibility periods.

Packaging aid from different sources. In some areas, policies allow state, local and private funding to be combined with federal funds so that the total amount of assistance will pay the balance of early care and education tuition and fees that the family cannot pay. When one source of funds will not fully meet a family's need for financial assistance, subsidy managers (or in higher education — *financial aid administrators*) attempt to patch together a package of funds that will make it possible for a family to obtain the needed early care and education services. For example, families eligible for Head Start or pre-kindergarten services — usually just half-day — may also qualify for child care funds. Together, the package of explicit and implicit aid has the dual purpose of meeting the child's developmental and educational needs while also meeting the parents' need for child care while they are working.

When rates are set lower than their prices, there is insufficient revenue to cover costs, and quality suffers.

However, some funding sources or agencies do not allow or encourage packaging of funds. In these cases, the funds provided by another source may be considered additional income to the family and can result in reduced eligibility for assistance the agency will provide.

Payment rates. Most states limit the amount they will pay in financial aid by establishing a "rate ceiling." This maximum amount is often related to early care and education prices measured in a market survey in the area. However, when subsidies do not cover the actual price charged beyond what the family can pay, parents may be required to pay more than they can afford to make up the difference. This can have the effect of limiting parents' choices to lower-quality early care and education, since high-quality programs are usually more expensive. Programs can also be adversely affected by rate ceilings. When rates are set lower than their prices, there is insufficient revenue to cover costs, and quality suffers. This effect is compounded with the enrollment of each additional child supported by state subsidies and leads some providers to decline enrolling these children in order to stay afloat financially. As a result, availability and choices for families decrease.[14]

Use of diverse forms of financial aid

The prevalent forms of need-based financial aid now available to help families pay for early care and education, as discussed above, are free services and subsidies (grants) for low-income families. In addition to these forms of assistance, families — predominantly middle-income families — can obtain benefits through the tax system: Dependent care assistance plans, offered by some employers, and dependent care tax credits reduce taxes, thus leaving more money in parents' pockets to pay for early care and education.

Subsidized and guaranteed loans for families. Subsidized and guaranteed loans are not now available to help families pay for early care and education. As a result, when families find that they must pay more for early care and education than they can afford out of current income, some have relied on high-interest-rate credit cards to make ends meet. Although some providers accept payment by credit card, families struggling to cover early care and education and other living expenses may pay their providers with cash and use credit to purchase other essential goods or services. It is not known to what extent some parents who own homes — 60 percent of families with children under age six do — may be using home-equity loans to finance early care and education.

Use of diverse sources of revenue

Endowment funds. The percentage of early care and education programs with their own endowment funds is not known, but is believed to be very small. Community endowment funds for early care and education have been established in a few communities, beginning with a child care scholarship fund to assist low- and moderate-income families launched in 1990 by the Marin Community Foundation in California. In 1998, community foundations in six Indiana counties established funds dedicated to supporting early care and education providers' efforts to enhance quality and achieve accreditation.[15] With only these limited experiments to draw from, it is too early to form broad conclusions about the capacity of endowment funds to generate significant revenue for early care and education. As these funds evolve, it will be important to track the role that endowment income plays in improving and sustaining program quality and increasing financial aid in the respective communities served by the funds. In the short term, however, it may be possible to identify the factors that contribute to attracting gifts to early care and education endowment funds.

Early care and education program revenues, subsidies, costs, prices and quality

Not only do many families need help paying for high-quality early care and education, providers also need considerable resources to produce it. While public funding is available to help some families pay early care and education program tuition and fees, it is not generally available as direct support to programs. In the absence of sufficient revenue, early care and education providers rely on in-kind support — *non-cash supply subsidies* — to produce their services. These include donated goods and services.

The market value of supply subsidies is rarely calculated as part of the cost. As a result, there is little understanding of what constitutes the full cost to operate a high-quality program. This contributes to a vicious cycle of setting prices too low to cover the per-child cost and underestimating the balance needed from other sources to make up the difference.

If the in-kind support on which programs rely were stable and dependable enough to produce the high-quality programs children need to thrive, there would be no reason to obtain additional revenue to replace the subsidies. However, program quality is generally low, due in large part to high staff turnover that results from low compensation. As a result, children's development is at risk. Thus, knowing the value of the subsidies is an important step toward replacing them with the requisite amount of revenue — both from tuition and non-tuition sources. Key relationships among early care and education program revenue, supply subsidies, costs, prices and quality are explored briefly below.

Revenue. The greatest portion of revenue for most early care and education programs is from tuition and fees, including payments made by families and financial aid (child care subsidies) paid in their behalf. Non-tuition revenue is extremely limited, both in terms of the diversity of revenue sources and the percentage of total revenue this represents. Tuition and fees represent an average of 89 percent of revenue in nonprofit centers and 97 percent in for-profit centers. Non-tuition revenue includes funds from the Child and Adult Care Food Program of the U.S. Department of Agriculture (USDA), contributions from program sponsors and grants from government and charitable foundations.[16]

Supply subsidies. In-kind support, or *supply subsidies*, provides services and goods at a free or reduced cost, thus decreasing cash expenditures that would otherwise be necessary. By far, the most significant of these subsidies is the contributed value of employee labor that exceeds the low level of financial compensation based on educational attainment. Other common supply subsidies include free or below-market rent, volunteer services, donated goods such as food and supplies

and free services such as maintenance. These subsidies are "hidden" both as revenue and as costs: They are neither accounted for on the balance sheet as non-tuition revenue, nor do they show up as expenditures.

Cost. An important bottom-line question for determining the early care and education budget is "What does it cost to provide high-quality services?" The challenge lies in accounting for the implicit costs as well as the explicit expenditures. Explicit expenditures represent only one component of cost — the expended costs. The other component consists of hidden costs — the value of subsidies provided to the program through donated goods and services. Implicit costs in early care and education are difficult to calculate, but they are crucial to understanding total costs. Although there is not currently a ready source of revenue to replace the hidden subsidies, accounting for all implicit costs as well as explicit expenditures paves the way for a better estimate of the amount of support needed to produce high-quality programs.

Price. Prices charged to families are closely related to the expended costs of the program and do not reflect the hidden subsidies provided by foregone wages and other donated goods and services. Non-tuition revenue, however little, also reduces the amount of tuition revenue sought to cover expenditures. Therefore, in many cases, the tuition price includes a large subsidy provided to all enrolled children, without regard to their families' financial need.

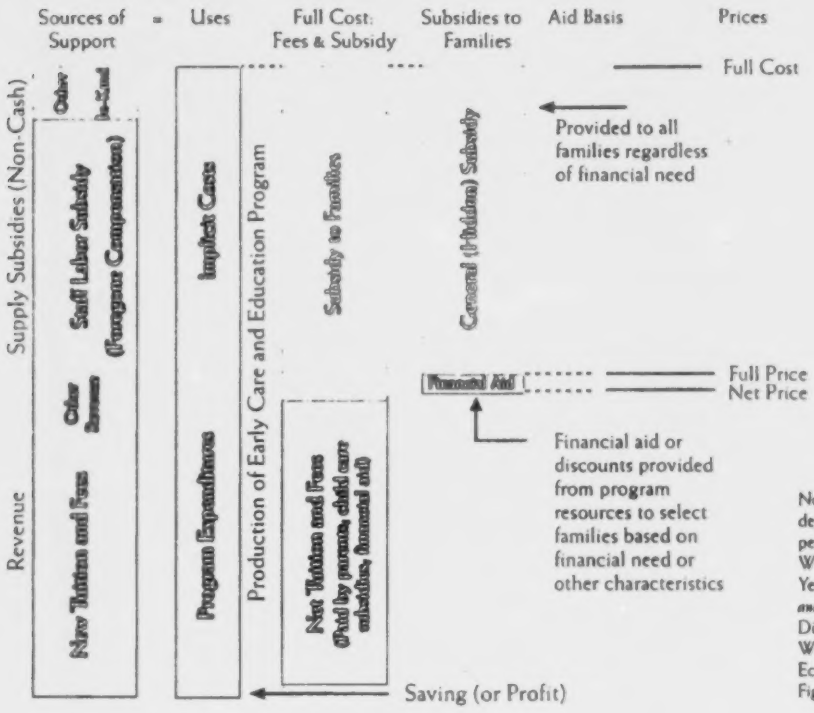
Early care and education providers set a price based on what they believe the market will bear — what they think families are willing and able to pay for their services. Competition with nearby and similar providers is also a critical factor in pricing services and often results in prices that are comparable, even when the value of the services differs. The market prices may mask significant differences in quality. For example, programs of higher quality can keep their prices competitive due to their larger subsidies, supplied by a combination of non-tuition revenue and hidden subsidies that include staff with better qualifications.

By subsidizing all families with lower tuition prices, providers miss the opportunity to collect additional revenue from any of the enrolled families — or their sources of financial aid — that are able to pay more of the per-child cost. Moreover, this practice perpetuates the myth that the price charged covers the cost of providing the service. It also exacerbates the fallacy of "double-dipping." Government funders believe that providing financial aid for an eligible child at the price charged covers the cost, and thus conclude that providing other funds to the program would constitute paying for the child twice. The subsidized tuition price thus obscures the fact that funds granted to the program would help to defray the considerable costs not covered by the price.

In addition to the subsidy provided to all families through a lower-than-cost price, some early care and education programs grant additional subsidies to individual families through the use of a sliding fee scale, often based on income level, or through price discounts based on income or other characteristics. Discounts, if granted, are often based on an indicator of need or association with the program. Typically, discounts go to families with two or more enrolled children, staff members who enroll their own children and families affiliated with program sponsors, such as discounts given to members of a church that provides a rent-free facility.

The subsidy received by all children — regardless of financial need — consists of a combination of non-tuition revenue, uncompensated services and facilities or other goods and services donated by sponsoring organizations or others. Financial aid for individual children and discounts offered by providers further reduce the price to a lower net price for some families.

Basic economic structure of early care and education programs: Revenue and support, costs, prices, subsidies and aid



Note: The conceptual model depicted here is adapted with permission from Cordon Winston from Winston, G. and Yen, I. 1995. *Costs, Prices, Subsidies, and Aid in U.S. Higher Education.* Discussion Paper No. 32, Williams Project on the Economics of Higher Education, Figure 1.

Quality. There are costs — and risks — to continued reliance on the labor subsidy. While these factors are difficult to quantify, they are important to recognize. Program quality cannot be achieved or maintained without staff who are qualified by education and training. The cost of not adequately compensating staff is high turnover that leads to replacements by less qualified staff. Ultimately, the result is poorer-quality programs that are more likely to pose harm and less likely to meet children's developmental needs. A recent report confirms the staffing crisis in early care and education: Trained teachers have left the field in droves. Without adequate salaries to attract and retain a skilled work force, early care and education programs are frequently unable to provide the quality of services children need.[17]

A 1995 study found that quality at most early care and education centers is poor to mediocre, with only 14 percent of the centers providing services of sufficient quality to promote healthy development and nearly 13 percent actually posing a threat to children's health and safety. The incidence of endangerment to infants and toddlers was far greater, with 40 percent of infant-toddler rooms judged as harmful.[18] Conditions in family child care homes are even worse, according to a 1994 study: 35 percent were found to pose harm and only 9 percent were rated as promoting healthy development.[19]

Efforts to improve quality have increased dramatically over the past several years as states have invested their substantial savings from welfare reform in quality initiatives. These have included state-funded training and college education for early care and education staff, compensation strategies for retaining staff and improvements in licensing. While these quality initiatives have been

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welcome band-aids, policy experts have long recommended that a systematic approach is needed to address revenue and quality shortcomings and to ensure positive developmental outcomes for young children.

Data

Early care and education data are extremely limited, particularly with regard to finance. The National Center for Education Statistics (NCES) in the U.S. Department of Education and the U.S. Census Bureau collect data that answer important questions about program participation, child care arrangements, fees paid by parents and related characteristics. NCES recently launched an ambitious longitudinal studies program to inform educators and policy-makers about early learning and education experiences and their impact on academic achievement. However, there is no comprehensive source of current statistics on programs that provide early care and education services, including sources and amounts of revenue in relation to enrollment and expenditures by category.

Program and finance data would help the field to understand more about costs by sector and auspice, region, ages served, program size and other characteristics. National survey data on staff positions, qualifications, compensation, longevity and other information would also provide important benchmarks for research endeavors to track quality.

Need analysis methodology and application

Objective 1: Develop a need analysis methodology and application for use in determining families' ability to pay for early care and education and their need for financial aid.

Purpose

Our purpose was twofold: (1) to develop a need analysis methodology geared to families with young children that incorporates applicable elements from higher education methodologies; and (2) to create an application form that captures the data necessary for the analysis. To these ends, we addressed the following questions:

- How should a need analysis methodology for early care and education financial aid differ from the methodologies used in higher education? What data sources and formulas should be used to construct a need analysis methodology that equitably measures families' ability to pay for early care and education?
- Based on the early care and education need analysis methodology, what data should be captured by the application to accurately determine families' ability to pay for early care and education? How can the application be made simple and straightforward for applicants while obtaining information essential to the analysis?

Higher education strategies

Distribution of need-based financial aid for higher education relies on standardized methods and application forms used nationwide. These methods are at the heart of a financial aid system that measures each family's ability to pay for college and the student's need for aid in relation to college attendance expenses. Any prospective or enrolled student, regardless of income level, may apply for assistance, which, if awarded, comes in the form of grants, loans or subsidized work — often in a package that combines two or more of these types of aid.

Applicants throughout the nation complete a free federal application form, which is required of all students seeking federal aid. The form is also often required for state and institutional grants. Applications are submitted, via the Web or on paper, to a central processing agency contracted by the U.S. Department of Education. The processor determines what each student and family can contribute using formulas of the Federal Methodology, which was authorized by Congress as the basis for distributing federal need-based student aid funds.

Some students also complete a separate application form required by numerous institutions to evaluate need for non-federal aid. They submit the Web-based or paper form with a processing fee to the College Board. The applications are evaluated using the Institutional Methodology, which was developed and is maintained by the non-profit College Board and is used by many private and some public institutions to allocate their own need-based aid funds.

For both federal and non-federal need-based financial aid, uniform need analysis methodologies are used to assess the family's ability to pay for postsecondary education. The amount each family is expected to contribute depends on family size, income, assets, number in college and other factors. In both methodologies — the Federal Methodology and the Institutional Methodology — basic allowances for taxes, savings and a modest living allowance are applied to family income and assets to arrive at the *expected family contribution*. Those with fewer resources qualify for more aid; those with greater discretionary resources are asked to pay proportionately more, up to the full price of college attendance.

Adaptation of higher education strategies

The use of a standard method and application form could result in multiple benefits for early care and education, with improvements for families, providers and in overall system effectiveness.

Families would have simplified access to financial aid. Instead of multiple applications, one form could collect all of the information needed to determine eligibility for each source and type of early care and education aid. The methodology would equitably measure their ability to pay for high-quality early care and education programs.

Early care and education program providers would no longer need to guess at what constitutes affordability for parents. With the support of a financial aid system, the amount each family could contribute would be uniformly assessed. This would allow providers to establish prices to cover a greater portion of the per-child share of full cost — including appropriate staff compensation — and thereby maximize revenue from those able to pay more of their share. Moreover, providers with their own tuition aid funds could use the same methodology and application to effectively distribute their own need-based aid funds.

System effectiveness would improve because the use of a standardized methodology would help policy-makers and implementers, such as state child care administrators, make the most efficient use of limited funds. Additionally, data collected would help to answer broad policy questions about affordability and unmet need for aid in early care and education, as they do in higher education.

Overview

The purpose of the proposed early care and education need analysis methodology is to fairly assess what each family, based on its financial circumstances, can reasonably be expected to pay for early care and education. Use of the method is envisioned as an essential element of a coordinated early care and education finance system designed to increase families' access to high-quality early care and education. The method is one component that interacts with other methods, resources and processes that together would constitute a functioning system.

The proposed methodology incorporates the best features of the formulas used to determine need for higher education financial aid. It also includes some new approaches in an attempt to construct a formula best suited to the circumstances of families with young children. Particular care was taken in the adaptation process to develop a method based on sound data and clear rationales. It is designed, as are the higher education methods, for annual updating to reflect changes in the cost of living.

Extensive efforts were made to develop a way to appropriately adjust expectations of what families are able to pay for early care and education according to regional differences in the cost of living. Yet, we were able to identify neither a satisfactory data source nor a sound method to accomplish this goal. We were encouraged to discover, however, a great deal of interest and activity among researchers focused on the development of such a method. It is our hope that, as the early care and education method evolves, the research will identify a means to adjust for regional differences in cost-of-living.

As in higher education, the analysis is designed to assess financial aid applications from families of all income levels, not just those from low-income families. The need analysis methodology, using family income and asset information supplied on the application, produces an "expected family contribution" — a representation of the family's ability to pay for early care and education. However, this is only part of the equation in answering the question, "How much assistance does the family need?" The amount of aid a family needs is directly related to the price of the services they seek, as illustrated by the following equation:

Price – Expected Family Contribution = Need

A separate calculation is necessary to establish the price of high-quality programs — a crucial analysis to be undertaken by each early care and education program. The need analysis results demonstrate that some families would be able to pay full price while many others would need financial aid to help pay it.

The Early Care and Education Need Analysis Methodology

A basic principle of the Early Care and Education Need Analysis Methodology (ECE Methodology) is that a family's capacity to pay is a function of income and assets. The first step in calculating the family contribution is to define income in a reasonable way. After subtracting appropriate allowances from income, a portion of the remainder is available to pay for early care and education. The same process applies to assets.

How does the ECE Methodology define income?

The ECE Need Analysis Methodology uses adjusted gross income from the federal income tax form as a basis to determine family income. However, it modifies the adjusted gross income, disallowing certain losses and adjustments that are permitted in the federal tax system but do not affect a family's ability to pay for early care and education. Untaxed income from Social Security, child support and other sources is also considered in determining a family's total income.

In addition to prior-year income, supplemental information about current income will be collected to assess any major changes in a family's financial situation. In some cases, where the fluctuation in income is significant, only the most current income information is useful in determining what a family can pay for early care and education.

What allowances are subtracted from income?

The ECE Methodology subtracts the following allowances from income before determining how much of the parents' income should be earmarked for early care and education expenses:

- *Mandatory taxes.*
  - Federal income taxes paid.
  - Allowance for state and local income, sales and property taxes.
  - FICA employment tax (Social Security and Medicare).
- The *Medical and Dental Expense Allowance* is used to account for exceptionally high medical and dental expenses reported by the family.
- The *Employment Expense Allowance* is used to account for expenses related to working outside the home if both parents are employed or if the parent is single. This provision recognizes that a two-parent family with two earners has less discretionary income than a similar family with the same income but only one earner due to additional work-related expenses, such as clothing for work and transportation between home, workplace and an early care and education program.
- The *Income Protection Allowance* represents the expenses of families living at the lower living standard defined by the Department of Commerce. The allowance does not identify the amount of money required by most families to cover their expenses, but is a much lower amount. Instead, it represents the income level below which a family has no discretion about how it spends its income. For example, the 2000-2001 ECE Methodology allowance for a family of three is $19,790, 140 percent of the 2000 Poverty Guidelines. Parents whose earnings fall at or below the allowance for their family size are not asked to make any contribution to their children's early care and education expenses. Those with higher incomes have more choices about how they spend their income and are therefore expected to use some portion of their discretionary income to pay for their children's early care and education.
- The *Annual Education Savings Allowance* recognizes that a family should save for the educational expenses of sending children to college. While the ECE Methodology is

directly targeted at providing access to high-quality early care and education, a broader goal is to encourage and assist families in planning and providing for the long-term well being of their children. Accordingly, this allowance protects a small percentage of income as savings for college. It is applied to each child beginning at age 6, rather than from birth, in recognition that early care and education expenses take priority over saving for college in the years before a child starts kindergarten. At that time, the amount the family has been contributing for early care and education can help pay for out-of-school-time programs and college savings. The allowance is designed so that families that save the specified fraction of their income each year — currently about 1.8 percent — will have accumulated about one-third of their expected parent contribution for a four-year college by the time their child reaches the age of 18. (The ECE Methodology assumes that the family will finance the remaining expected contribution for college from current income and borrowing.)

How much of their income are families expected to contribute?

After subtracting taxes and other appropriate allowances from total income, a portion of the remaining discretionary income is tapped for early care and education expenses. Similar to the federal income tax rate structure, the ECE Methodology's assessment rate structure applies a lower rate — 22 percent — to the first dollars and progressively higher rates to additional dollars of discretionary income. Even families subject to the highest rate — 47 percent — are asked to pay that rate only on their last dollars of discretionary income.

How does the ECE Methodology define assets?

The ECE Methodology considers assets in determining families' ability to pay for early care and education because families with assets are in a stronger financial position than a family relying solely on current income. For example, liquid assets, such as bank accounts and stock holdings, can clearly be liquidated if necessary. Even if these savings are earmarked for other purposes, families who have these funds are in a better position to use more of their current incomes than are those who have no such resources.

It is not practical to include all categories of assets (such as pensions), but the definition is as comprehensive as possible. Savings and investments are taken into account, as is the equity in other financial assets such as the home, other real estate and business and farm assets. While no one expects a family to sell their home to pay for early care and education, a homeowner is in a stronger financial position than a renter with the same income and no assets. Fixed and liquid assets, together with income, gauge a family's overall financial strength.

It is important to note that the ECE Methodology does not expect a family to deplete its assets to pay for early care and education. Although a family's expected contribution is somewhat higher if there are assets than if the family had not saved at all, the ECE Methodology considers only a very small percentage of a family's assets as available to pay for early care and education. After subtracting the asset allowances, many families will not be expected to contribute from assets at all.

What allowances are subtracted from assets?

Two major allowances — the *Emergency Reserve Allowance* and the *Cumulative Education Savings Protection Allowance* — are subtracted from assets before determining how much of a family's net worth should be considered discretionary and available to tap for early care and education expenses.

- The *Emergency Reserve Allowance* protects assets for unanticipated expenses such as illness or unemployment. The amount is based on family size and represents six months of average family expenses as reported in the federal Consumer Expenditure Survey.
- The *Cumulative Education Savings Protection Allowance* recognizes a family's need to save to finance their children's college expenses. This

allowance is calculated for each child 6 and older. It protects an amount of assets equal to the amount the family would have accumulated if they had saved a specified percentage of their income each year for each child, beginning when the child was 6 years old.

- The *Low-Income Asset Allowance* recognizes that a family with very low income needs additional asset protection because assets may be needed to cover basic living expenses.

What portion of assets are families expected to contribute?

For families that have accumulated assets beyond the amount of the asset allowances, 10 percent is tapped to supplement income in paying for early care and education expenses. The ECE Methodology expects a higher contribution from assets than either the Federal Methodology or Institutional Methodology because it is assumed that parents with young children generally have a longer period of time in which to accumulate additional assets than do parents of college-age children. However, adjustments will be made for older parents.

Is the contribution the same if more than one child is enrolled?

Families that have more than one child, regardless of the spacing of those children, usually have to pay more for early care and education than families with only one child. However, the ECE Methodology recognizes the particular strain on families with two or more children in early care and education at the same time and reduces the expected contribution for each child when more than one is enrolled. If two children are enrolled, the ECE Methodology expects the family to pay only 60 percent of the expected contribution for each child; if three children are enrolled, it calls for families to contribute 45 percent of the expected contribution for each child.

Who makes the final determination of how much a family is asked to pay?

The ECE Methodology cannot account for all of the circumstances affecting a particular family, but it can provide to the financial aid administrator the best available indicator of how each family's financial strength compares to that of other families applying for aid. Responsibility for the final determination of the family's share of early care and education expenses rests with the early care and education financial aid administrator, who can use professional judgment in reviewing information about any relevant special circumstances in relation to the family's income and assets. Prudent financial aid administration would include an appeal process as well.

What is the eligibility period?

We recommend that need analysis be conducted on an annual basis as a realistic and efficient time period for determining and granting eligibility. We recognize that family situations may change over the course of a year, but it is assumed, as it is in higher education financial aid, that these changes will be captured during the next application period. However, families with significant and substantial changes in their circumstances could apply for special consideration at any time. Changes that warrant an interim adjustment would include job loss, a long illness or disability, change in marital status or size of family and similar events that alter the income available to pay the family's share of early care and education expenses.

Application form

The application form is designed to collect the data needed in the ECE Methodology formulas as well as additional information to assist the aid administrator in determining eligibility for various sources of aid. The draft form can be modified to reflect the common data needs of sites that wish to adopt the methodology for use in determining families' ability to contribute to expenses for early care and education and out-of-school-time programs.

Periodic revision and updating

The methodology and application should be reviewed periodically and updated annually. The goal is for the ECE Methodology to evolve as a "consensus methodology" of the participating communities and/or organizations that elect to use it. To this end, the review process would involve a representative group of early care and education financial aid administrators who are using the methodology and application with families. Economists and national financial aid experts would also provide guidance in this interactive process that examines the methodology from a variety of perspectives. Such a process would maintain the methodology's sound economic foundation while also judiciously incorporating changes that reflect experience gained through its use.

Annual updating of the underlying formulas of the ECE Methodology is needed to incorporate the most current economic data available, whether or not any substantive changes are made to the methodology itself during the periodic reviews.

Additional information

A technical report, available from Lumina Foundation for Education, provides additional details regarding the ECE Methodology, including computation tables with the basic formulas, a description of data sources and calculations and a draft application form.

This proposed Early Care and Education Need Analysis Methodology is a work in progress and will be revised as a result of ongoing research and testing of the method in various communities. Inquiries about the availability of the method for testing should be directed to the author.

Application processing and community-based financial aid administration

Objective 2: Design application processing methods and a model for community-based financial aid administation.

Purpose

Our purpose was twofold: to develop a basic model for financial aid administration and to describe feasible application-processing methods for an early care and education financial aid system. To do so, we addressed these questions:

- Which of the basic functions and processes of a college financial aid office could be adapted for the management and distribution of financial aid for early care and education?
- How could financial aid applications be processed to ensure accuracy, timeliness and cost-effective operations?

Higher education strategies

More than half of all college students receive some form of financial aid. The first step in obtaining that aid is the college financial aid office, which provides outreach, information and financial aid counseling to students and their families. It also assists with aid applications and packages financial aid according to available resources and students' eligibility. It serves students of diverse family backgrounds and economic status, helping them obtain funds to pay for the full range of college-related expenses — tuition and fees, room and board, transportation, books and other miscellaneous expenditures.

Students must attend institutions that meet federal funding standards to receive federal student aid — the source of nearly 70 percent of all aid awarded to students. The funding standards are intended to ensure basic quality and accountability of colleges participating in the federal financial aid system.

Outreach and information. College and financial aid information is widely available to prospective students in public libraries, high schools, free publications and through toll-free telephone lines and the Internet. Some of these sources provide independent ratings of college programs and prices. Outreach programs also target elementary and secondary students who might not otherwise consider college. To encourage students to pursue postsecondary education, high school counselors and college financial aid staff advise high school students of the availability of various forms of aid and the applicable eligibility criteria.

Application processing. Applications for financial aid are submitted online or on paper forms to a central processing agency for determination of the *expected family contribution* (EFC). The proportion of students filing applications via the Internet has increased dramatically in recent years.

Aid administration. College financial aid offices verify the application information supplied by students and their parents and then assess families' need for aid based on their EFC and college attendance expenses. These offices package various types of aid from different sources according to eligibility criteria and availability of funds. As the hub for obtaining and distributing student aid, the financial aid office manages and disburses funds and files reports to the U.S. Department of Education and other funders. To be eligible to participate in federal aid programs, institutions must be accredited, offer a program of a minimum duration of clock hours, be in operation for at least two years and sign a participation agreement with the Department of Education.

Adaptation of higher education strategies

We began our adaptation work with the assumption that, once a uniform method of assessing families' need for aid were adopted, a community-based intermediary structure would serve as a hub of the early care and education aid-delivery system, much as a college financial aid office does. This early care and education financial aid community hub would assist applicants, package aid and make aid award payments on their behalf to providers that meet the system's quality standards and choose to participate. The hub could also become the locus for contributions to scholarship funds, savings plans and an endowment fund, in addition to administering public funds for early care and education. As in college financial aid offices, all socioeconomic groups could be served in the same community-based agency without the stigma often associated with seeking public assistance for early care and education.

All socioeconomic groups could be served in the same community-based agency without the stigma associated with seeking public assistance.

Overview of recommendations

Community-based financial aid administration

Several core functions were identified as essential for agencies responsible for the delivery of early care and education financial aid. One example of an agency that could provide these services is a child care resource and referral (CCR&R) agency that already provides core outreach and referral functions for families seeking early care and education. However, other types of community agencies may be equally suited for the financial aid tasks; this will vary somewhat by community. The financial aid and referral services described below could be integrated in one agency or performed by separate agencies. The key is smooth coordination of all functions for the benefit and ease of families.

Financial aid adminstration and early care and education referral core functions

1. Provide or ensure the availability of information to the public and to families with young children about the importance of the early years and the critical role that high-quality early care and education plays in supporting child development.
2. Coordinate delivery of financial aid and referral services to families by either providing both services together or by ensuring a streamlined delivery of services in partnership with another agency.
3. Identify all sources of financial aid funds and their eligibility criteria. For funds under the agency's control, determine allocation priorities that incorporate distribution requirements and policies of each funding source.
4. Implement public-awareness efforts so that potentially eligible families are aware of the availability of funds from all sources.
5. Provide multiple access points for applications and information, including hospital maternity wards, schools, health care providers, early care and education providers, libraries and community agencies.
6. Identify early care and education programs that meet quality standards established by the funding sources and the community, e.g., accreditation or other recognition of quality.
7. Identify providers that need help to meet the funding standards. To the extent possible, provide appropriate resources and technical assistance to support efforts to provide high-quality early care and education.
8. Enter into participation agreements with providers that are willing to participate in the financial aid and payment system and meet the system's designated funding standards for

program quality and accountability (or demonstrate commitment and progress toward meeting the standards).

9. Assist parents in choosing an early care and education provider that meets their needs and criteria.
10. Assist parents, as necessary, in completing financial aid forms.
11. Verify applicants' information and eligibility for aid.
12. Inform applicants about the availability of funds for which they qualify and other financing strategies, such as tax credits.
13. Review financial aid application information, as necessary, to ensure that families' special circumstances have been considered in determining their need and eligibility for aid, e.g., extraordinary medical expenses, disabilities, changes in marital or employment status, etc.
14. Manage financial aid funds from multiple sources, e.g., various federal, state, local, employer and philanthropic funds for child care, education, work force development, etc.
15. Coordinate financial aid services with early care and education programs that have their own financial aid funds.
16. Package available aid for families according to elibility criteria and allocation priorities.
17. Make timely financial aid payments to providers on behalf of the families who receive awards.
18. Perform accountability and reporting functions as required by each funding source.
19. Collect and analyze data about the need for aid and the extent to which aid meets need.

Community agencies responsible for both financial aid administration and traditional child care resource and referral services might consider incorporating additional functions that would enhance the agency's role as a hub in the early care and education system. For example:

- Cultivate additional funding for programs and sources of aid for families (development function).
- Serve as a conduit for funds to directly subsidize programs. These funds would help programs sustain operation, adequately compensate staff and support them in reaching and maintaining high-quality standards
- Serve as an intermediary that brokers technical assistance and support services for programs.
- Provide career counseling for early care and education practitioners.
- Serve as an intermediary that provides or brokers support services for young children and families.
- Collect data on all aspects of the early care and education system, including financial aid, to contribute to state and national data sets for policy-development purposes.

Financial aid application processing

We recommend a centralized Web-based processing system for all financial aid applications. Parents could have the choice to complete a paper application, but the information submitted would then be entered on the Web-based form. There are some important advantages for both applicants and agencies with a Web-based application form:

- For the applicant: Online instruction can be context-sensitive and customized for the user based on his or her responses, making it unnecessary to wade through application sections and instructions that do not apply to the applicant's situation.
- For the agencies: Multiple users do not need the software or software updates. The software resides on the central Web site, where application processing is accomplished. Financial aid staff can visit the Web site to make local adjustments as necessary.

Some advocates have raised concerns that an online form would be intimidating or inaccessible to many parents, particularly those from low-income families. While accessibility to computers and the Internet is rapidly increasing among all groups of Americans, it is true that gaps remain and more needs to be done to help close the

"digital divide." For example, expansion is needed in the number of community access centers that provide computers for public use. Research shows that many people who do not have other access often use computers and Internet connections at public libraries, schools and community centers. In this regard, community financial aid agencies can be part of the solution by extending a hand to new computer users and offering access to computers at the community financial aid office.[20]

Paper forms would continue to be available to anyone who prefers to use them or for whom computer and Internet access is unavailable or inconvenient. Whether the application is submitted electronically or on paper, parents would be required to submit verification documents and signatures to the agency.

Local agency personnel would provide financial aid counseling, assist applicants throughout the process as needed and ensure that the EFC results from the central processor appropriately reflect the family's circumstances and ability to pay.

The early care and education financial aid process for families, providers and aid agencies

What would the financial aid process look like from the perspectives of families, providers and community financial aid agencies? The process we suggest is outlined below and on Page 33.

Providers demonstrate compliance with the system's funding standards as a condition of participation. Providers that meet the standards for program quality and accountability or demonstrate movement toward full compliance within a probationary period would be eligible to participate in the financial aid and payment system. A participation agreement would describe the responsibilities and accountability requirements of participating programs and the financial aid agency. The agreement would allow providers to accept financial aid payments on behalf of children they enroll and would require them to notify the agency of excessive absences, withdrawals or changes in the services a child receives. Participation would also qualify providers for funds as direct operational support for their efforts to achieve and maintain the system's standards of quality.

Information and outreach to families regarding child development and early learning. Information would be made readily available through hospital maternity wards, libraries, schools, physicians and through social service, health and community agencies. The information would focus on how young children develop and learn, the value of high-quality early care and education programs and how to obtain information about early care and education programs and financial aid.

The family's search for early care and education programs and assistance begins. Information designed to assist families in locating the programs and resources that best meet their needs would be available through national and local Web sites that link to local early care and education agencies, at local libraries and directly through the local early care and education agencies themselves, either via phone or an on-site visit.

During these first contacts, families would find out about early care and education programs, their quality ratings and prices, the availability of financial aid, eligibility criteria and how to obtain financial aid applications. An *Expected Family Contribution* (EFC) estimator, available on various Web sites, could help families estimate their potential share of program tuition and fees based on the early care and education financial aid methodology.

The family submits a financial aid application. The application would be submitted online to a central server, indicating the local agency and/or the provider that is to receive the information. On this initial application, parents would also provide information about the providers they seek, based on the information they have thus far. A toll-free telephone "help line" would be available.

The software would customize the online application based on the features and options

selected by the local agency and the information provided during the application process. For example, if the family's initial responses indicate they are qualified to complete a simplified form because they have been deemed eligible for means-tested public assistance, detailed questions about income would not appear.

Families without computer and Internet access or those who need additional support could submit a paper application to the local agency, where the information would be entered on a Web-based form on behalf of the family. Alternatively, families could obtain assistance in using a computer to complete the application themselves.

Reports are provided to the family's designated participating local agency. The agency would receive the calculated EFC from the central processor and then send a packet to parents that includes:

- The EFC (pending verification).
- Information about next steps in the process (e.g., the family submits tax returns and the agency then verifies the application information and, if necessary, adjusts the EFC).
- Information about the availability of spaces in early care and education programs based on parents' search criteria, including program prices, whether or not the providers have their own sources of financial aid and, if so, what the criteria are.
- The family's eligibility for available financial aid.

OR

In some cases, reports could be sent directly to a designated provider. Parents could authorize release of their EFC report to a provider with an "associate membership" in the financial aid system. Providers would qualify for this membership if they have their own source of financial aid funds that is both entirely private and under their control. They could use the application and processing service for distributing their own aid funds or tuition discounts to their enrolled families who are not seeking financial aid through the community agency. This service to providers would promote consistent community standards for the determination of a family's expected contribution and would help programs allocate aid according to need.

The family visits programs that match its search criteria and meet the system's quality standards. Parents seeking to make informed decisions could consult independent guides that list quality ratings and obtain the consumer complaint history of specific programs. If they wish, parents could share information about their EFC with the providers they visit.

The family notifies the local agency of its choice of provider(s). Parents would choose a provider that meets their search criteria and inform the agency of their choice.

The local agency prepares an award package for the family. The award package would be based on the family's need, the amount of available aid funds for which the family is eligible and the allocation priorities and policies of the funding sources and the agency. Need is determined by the following equation: *Price of chosen program(s) — Expected Family Contribution = Need*

The family confirms choice of provider or chooses a different provider. Parents would make a final decision about providers based on the amount of aid available to them and what their share of the price would be (i.e., *Price – Aid = Family Share.*) If the aid were insufficient to help the family pay the price of their first-choice provider, they could choose a provider that can accept the amount they can pay with their aid package. Parents would share their EFC report with the program(s) they select.

The agency certifies to the provider that the family will receive a financial aid award. Once a provider has an agreement with the agency, the agency would verify, on a case-by-case basis, the amount to be paid on behalf of each family that chooses the provider.

The agency pays the award amount to the provider according to a mutually acceptable billing and payment schedule. The agency would make payments directly to the participating provider in accordance with the provider's payment policies, combining financial aid payments for all children enrolled with the same provider. Provisions could also be made for electronic transfer of funds where this is efficient. Payments could be made in advance on a monthly, quarterly or semiannual basis.

The family pays its share of the early care and education expenses directly to the provider. The parents would pay their share — either the EFC or the difference between the price and the amount of aid awarded (*Price – Aid = Family Share*).

The agency collects and maintains data to document need, financial aid utilization and gaps in funding. Among other relevant statistics, the agency would report aggregate data on need (*Price – EFC = Need*) and unmet need (*Need – Aid = Unmet Need*), including the characteristics of those who receive aid and those who do not and the role of aid in access to high-quality early care and education.

Challenges and next steps

The methods and processes described above are presented as "broad brush" recommendations for application processing and community-based financial aid administration. Additional discussions and planning are needed to address implementation issues and operational specifics, such as capacity building, cost projections to provide the services and the development of financial aid policies and procedures.

For example, research is clear on the need to improve the quality of early care and education programs. As funders and parents increasingly seek quality assurance and accountability, strengthening funding standards will be critical to increasing investments in early care and education. It will require careful planning and sensitive policies to adopt effective standards for participating center-based and family child care programs while also administering funds that permit paying *kith and kin* providers (family members and close friends).

Policy-makers and early care and education leaders wishing to take next steps in preparation for a coordinated finance system could start by exploring the implications of these recommendations within the context of specific communities. Although a financial aid system may be most effective if coordinated statewide, cities or counties are well suited to take a lead in testing and refining the recommended methods and processes on a smaller scale. Potential outcomes, even with limited funds for financial aid, include efficiencies in the early care and education financial aid delivery system, quality improvements and greater equity and access for young children and their families.

Financial aid: Steps for families, providers and community aid agencies

Steps in Process	FAMILY	PROVIDER	COMMUNITY AGENCY
Provider participation		Meets and maintains standards, demonstrates accountability.	Outreach to providers, signs agreements with qualified providers.
Outreach, awareness, education activities to reach families of young children	Obtains information. Learns to recognize and seek programs that meet quality criteria.	Assists with outreach efforts.	Provides support and resources to families. Coordinates outreach and public information efforts with ECE providers, other agencies.
Family search for ECE and financial aid	Obtains information about ECE providers and financial aid via Interent, phone, library, site visits. Identifies criteria for ECE. Receives a list of ECE programs that meet criteria.	Updates program and vacancy information for posting with community agencies.	Provides information and resources about choosing ECE and applying for financial aid via Web, e-mail, phone, on-site visits . Provides list of providers that meets family's search criteria and that participate in financial aid system.
Application for financial aid	Completes Web-based or paper application form, sends documentation to local agency.	Makes forms available, may assist families with application.	Makes forms available, provides assistance to families, interfaces with Web-based form.
Report on *Expected Family Contribution* (EFC)	Receives a preliminary report of EFC from central processor. Receives estimate of potential aid award range from local agency.	Receives report of family's EFC, if designated by family to receive it.	Receives report of family's EFC from central processor, verifies with family's documentation and adjusts as needed. Provides family with estimate of potential aid availablility.
Interviews/visits with providers	Calls and visits providers that meet criteria.	Provides information and tours, answers questions.	
Family chooses provider(s)	Notifies agency of choice of provider(s). Identifies alternate choices if aid does not meet need.	Reviews family's EFC and determines if family qualifies for any provider-controlled financial aid.	Confirms provider's eligibility and participation in system. Determines family's need for aid (Price – EFC = Need).
Award package, Family confirms choice of provider	Based on financial aid award, determines if able to pay provider's price (Price – Aid = Family share). If necessary, seeks alternate provider that meets search and price criteria.	May supplement family's award, if insufficient, with own aid funds, if available.	Packages available aid to meet family's need, based on (1) family's eligibility for funds from different sources and (2) system/agency allocation priorities.
Payment agreement	Agrees to pay provider the family EFC amount or, if need is not fully met with aid, agrees to pay Price – Aid.	Enters agreement with agency and family to obtain payment for services.	Certifies to provider the amount the agency will pay for the family.
Payment for services	Pays provider family's share of price: EFC amount or Price – Aid.	Invoices agency for eligible children, maintains records.	Pays provider in advance or according to provider's payment policies for all enrolled families receiving aid.
Data and advocacy	Advocates for adequate funds to meet need.	Advocates for adequate funds to meet need.	Reports on unmet need, advocates for adequate funds to meet need.

Cultivating new types of early care and education financial aid: assessing the feasibility of loans

Objective 3: Design family loan programs as a potential form of financing to help families pay for early care and education.

Jerry S. Davis is the author of this section

Purpose

To develop new forms and sources of financial aid for early care and education, the project launched an inquiry into the feasibility of subsidized and unsubsidized loans. Our purpose was to propose program designs that would be appropriate to the circumstances of families with young children, considering their other financial obligations and income levels. We addressed these questions:

- Which families might benefit from the availability of loans for early care and education?
- What is the potential market for early care and education loans?
- What are the potential sources of capital?
- What design elements would make loans feasible for families? For lenders?

Higher education strategies

Public and private loan programs that offer long-term, low-interest loans to pay for tuition and other expenses charged to students are a primary feature of financing college education in America. More than half of all full-time students at four-year colleges use student loans to meet expenses. About one in 16 dependent students' parents use federal or private loans to help pay the bills. Student and parent loans make it possible to afford costs of attendance because they stretch education payments over extended periods of time and allow borrowers to pay for current expenses with future earnings.

There are three basic ways that governments subsidize loans to pay for postsecondary education expenses. First, governments can pay interest on behalf of the borrowers while they are in school or otherwise unable to afford payments. In the case of the Federal Family Education Loan Program (FFELP), these payments are made on behalf of borrowers to the lenders that provide the loan capital. Under the Federal Direct Student Loan Program (FDSLP), the government forgoes collecting interest during "in school" or other specified periods.

Second, governments can subsidize loans by guaranteeing payments of interest and capital to private lenders when borrowers cannot pay their loans due to default, death, disability or bankruptcy. In the FFEL Program, these amounts are paid to private lenders to cut their risks of lending to students and enable them to make loans at lower interest rates because they do not have to earn interest payments to cover these losses. In the FDSLP, the government provides the loan capital and accepts the losses due to default, death, disability and bankruptcy.

The third way of subsidizing loans is to pay private lenders an additional percentage rate payment (called a Special Allowance Payment in the FFEL Program) on the borrowers' behalf. This means that the government supplements the borrowers' interest payments to lenders so borrowers don't have to pay the higher "market" rate that lenders would otherwise have to charge them. In the Direct Loan program, the government subsidizes the interest rates simply by not charging borrowers as much as needed to cover losses.

The Federal government also operates a third major loan program for postsecondary education students, the Federal Perkins Loan Program. In this program colleges and universities annually apply for "federal capital contributions." These amounts are placed in a "revolving fund" from which the

institutions make loans to certain eligible students. When the students graduate or leave school, they make loan payments directly to their colleges who gave them the Perkins Loans. These payments are deposited in the "revolving fund" and are loaned to new student borrowers. We excluded this program as a potential model for an early care and education loan program because of its administrative complexity and because only a few providers would have the ability to administer loans and collect them over the long periods of time parents would likely need to repay them. In the FFELP, private lenders service and collect loan payments. In the FDSLP, the government contracts with private loan service bureaus to service and collect loan payments.

In addition to the student loans described above, the federal government offers loans to parents through the Parent Loan for Undergraduate Students (PLUS) program. In this program, the government guarantees the loans and caps the interest rate, but does not pay "in school" interest.

Adaptation higher education strategies

Families with young children, like college students, need additional sources and types of aid to help them pay the full price of early care and education. Loans might be particularly helpful for families who, without such assistance, run the risk of amassing high-interest credit card debt in trying to make ends meet. At the same time, there are important differences between obtaining loans for college and borrowing for early care and education. Parents who borrow to pay for early care and education cannot count on higher earnings as a direct result of this investment, as can students who rely on loans to complete their college degrees. Yet, there may be good reasons to consider including a loan in a family's financial aid package in some situations.

For this investigation, it was hypothesized that subsidized and unsubsidized loan programs would be appropriate to the circumstances of some families with young children. It was also hypothesized that programs could be designed to offer affordable loans to pay for current early care and education expenses without encumbering the families' savings to meet future responsibilities for financing higher education.

Two sets of activities were used to address these hypotheses. One involved conducting a series of focus groups with parents of children in early care and education or after-school programs to gauge their potential interest in participating in different kinds of early care and education loan programs if they were made available. The second set of activities involved analyzing United States Bureau of Census data on incomes and characteristics of families with children to determine how much they might reasonably afford to borrow under various circumstances.

Focus group findings

The five focus groups involved cross-sections of parents with varied family characteristics. We recruited moderate- to upper-middle-income parents whose incomes would most likely qualify them for loans; parents with various family sizes, including single parents; parents who were members of different racial-ethnic groups and had children of various ages (0 to 12 years of age); parents who were homeowners or renters; and those who had no, some or many years of postsecondary education.

The focus group leaders asked the parents for their reactions to an "imagined" future situation in which there was a coordinated way for families to get help to pay for high-quality early care and education. It was suggested that, in this future scenario, the price of early care and education would be much greater than the current prices and that all families, not just the poorest families, who needed help to pay for high-quality early care and education would seek financial aid. Then the parents were asked a series of questions about loans and borrowing to pay for early care and education. They were shown "loan scenarios" in which the loan principal, interest rates, terms and

origination fees were charged. (The future scenario and loan scenarios are described in the technical report.)

The loan characteristics were based on those found in private loan programs offered to parents to pay for private elementary and secondary school charges. In some scenarios, the loan interest rates were as low as those in current federal subsidized loan programs for college students. To determine which loan characteristics were most and least attractive, the parents were asked their opinions on borrowing under the different sets of circumstances. Because we had hypothesized that using government subsidies to cut borrower costs would make loans more attractive to the parents, the focus group leaders asked questions about what kinds of subsidies, e.g., subsidies to interest rates or lender fees, would help make loans attractive.

Resistance to higher tuitions may signal a lack of awareness about the potential long-term value of early care and education.

Next, the focus group leaders asked parents which lenders they would most and least prefer to borrow from: (a) a private lender, such as a bank or credit bureau; (b) a federal, state or local governmental agency; or (c) the early care and education programs serving their children. If they became borrowers, would the parents want to repay their early care and education loans through automatic withdrawal and transfer from a bank account?; (b) a monthly payroll deduction plan?; (c) writing a check each month?; or (d) making a payment every six months? Finally, the parents were asked if they were willing to borrow for early care and education expenses, would they be interested in borrowing all or just a portion of the program prices.

The focus groups revealed strong opinions and consensus that using loans to pay for early care and education is infeasible and unnecessary. Many parents were unwilling to pay higher tuitions than they currently paid for early care and education, even if loans were available to help them afford the expenses. Part of the resistance to higher tuitions may signal a lack of awareness about the potential long-term value of early care and education for their children. Many parents saw early care and education as a support that allowed them to be employed while their children were safe and had opportunities to develop social skills. They did not, however, see a clear link between early care and education experiences and current expenses with the future success and well-being of their children. Early care and education was seldom regarded in the same way as college, i.e., as an investment in their children's future, since parents expect that with college diplomas their children will get better jobs. They were not anxious to take out loans to pay for enhancing services with which they were already satisfied and paying for without loans. Moreover, many parents expressed resistance to borrowing and applying for aid to pay for early care and education expenses, because they were reminded of their frustrating experiences with college financial aid applications and processes.

Despite the parents' opposition to borrowing for early care and education expenses, the focus group leaders asked them to consider the different loan payment scenarios and describe which features were most and least appealing. There was great consensus that the typical interest rates offered in the scenarios were too high. Based on the parents' reactions, we concluded that a saleable loan program would have to feature interest rates that are equal to or less than rates offered in current federal student aid program — generally between 6 percent and 8 percent.

When asked about their preferred loan administrators, similar proportions of the parents chose banks or credit bureaus, federal or state agencies and their early care and education centers. Those who picked governmental agencies thought they would offer more lenient repayment terms. Those who chose banks or credit bureaus said they already had comfortable financial

dealings with them. And those who preferred their early care and education centers believed their centers should use the profits from loan interest to improve their early care and education services. Some parents opposed loans from early care and education centers because they thought such loans could inhibit their ability to transfer their children to other programs.

The parents preferred monthly loan payments, with the most parents choosing to have loan payments taken directly from their paycheck or their banks. No parents wanted to make payments only once every six months, reasoning that if they had that much cash at one time they would not need a loan. No parents wanted to borrow enough at one time to pay for more than one year of early care and education expenses. And nearly everyone agreed that loans for early care and education should be paid off by the time children enter intermediate or high school, so as not to interfere with saving for college expenses.

Few parents in any of the focus groups made the connection that charging more for early care and education could greatly improve its quality. Consequently, the parents were generally unwilling to borrow to pay for charges that were greater than their current ones.

To provide incentives for parents to participate in an early care and education loan program, the loans would have to be subsidized — by the federal government, state governments or a private, philanthropic organization — to keep the borrowers' costs low enough to make payments affordable and attractive. In this scenario, private lenders and providers of loan capital would have to be insured against borrower default, death and disability, and loan interest rates would have to be subsidized at a high enough level that lenders would be willing to devote capital and administrative resources to early care and education loans. This scenario is the basis of operation in the current Federal Family Education Loan Program for college students and their parents.

Alternatively, a governmental or philanthropic organization could directly provide the loan capital at below-market interest rates and absorb loan losses due to death, disability and default. These practices minimize earnings on the loans. This is the basis of operation in the current Federal Direct Student Loan Program for college students and their parents. Thus, for early care and education loan programs to work, they must provide loans to parents at affordable rates. To provide loans at affordable rates, the early care and education loan programs must be subsidized by a public or private entity.

Census Bureau data analysis findings

To estimate how much parents might be able to afford to borrow to pay for early care and education, we analyzed data from the U.S. Bureau of the Census Current Population Survey for 1999 as of March 2000.

Family Incomes: The median annual income of all primary families with young children was approximately $35,800. The median for married couples was $50,500; for single fathers, $22,600; and, for single mothers, $14,000. About 25 percent of all families with young children have just one child and 86 percent have three or fewer children under 18 years of age. Counting children and parents, the average size for all families is only 3.17 persons.

There were significant regional differences in the family income distributions. These differences suggest that the demand for early care and education loan programs will vary considerably by region. They also suggest that loan programs might have to be structured in different ways in different regions, because the ability to repay loans will be different. (See the family income data on the next page.)

In the Northeast region, 27 percent had incomes of $70,000 or more versus 19 percent of the national total. Incomes were more evenly distributed in the Midwest region than the others. Higher percentages of families in the South and West had incomes of less than $20,000.

Family Characteristics: Families in the South were more likely to have fewer young children; only 31

Family income data from the Bureau of Census Current Population Survey

Family Incomes	Northeast	Midwest	South	West	Nation
Under $20,000	27%	25%	32%	32%	30%
$20,000 to $29,999	11	12	14	15	13
$30,000 to $39,999	10	11	12	13	12
$40,000 to $49,999	10	11	9	10	10
$50,000 to $59,999	8	11	8	8	9
$60,000 to $69,000	7	9	6	6	7
$70,000 or More	27	21	19	16	19
All Incomes	100%	100%	100%	100%	100%
Median	$42,000	$41,800	$33,300	$32,300	$35,800

percent had more than one child under age 6. However, 40 percent of Midwest families had two or more young children, versus 35 percent for all the regions. Western families matched the national percentage of 35 percent with more than one child under age 6, while only 33 percent of families in the Northeast had multiple children under age six.

About 21 percent of families with young children were headed by someone who had not finished high school, and 29 percent were headed by persons who only had high school diplomas. Half the families were headed by persons with at least some college education, with 17 percent having bachelor's degrees and 8 percent having earned graduate or professional degrees.

About 61 percent of families with children 6 or younger owned their residences. Another 37 percent lived in rental properties and the remaining 2 percent lived in residences without cash rents. As expected, lower-income families were much less likely than others to live in homes they owned. Only 34 percent of families with annual incomes below $30,000, but 75 percent of families with higher incomes, owned their homes. About six out of 10 families owned their homes, and their average home equity was about $32,000.

The census data show that families with young children generally are not very good candidates for loans or increased debt. Four out of 10 such families earned less than $30,000 per year. Three out of 10 families were headed by a single parent, which generally means there will be only one salary earner in that family. Three out of 10 have more than one child under age 6. The census data revealed that six out of 10 parents were only working part time.

Thus, the analyses of the census data demonstrated what we had anticipated: It would be very difficult for many families to rely on loan programs to help cover early care and education expenses. (Additional census data are included in the technical report.)

Who might benefit from early care and education loan programs

After analyzing the focus group and census data, it was clear that the original study goal to design loan programs for early care and education did not seem warranted at this time. However, we decided to develop some estimates in order to examine what types and sizes of loans might be of interest to parents — particularly if early care and education program prices were to rise significantly and the benefits of high-quality early care and education were better understood by families.

If loans were to be offered, we envision their use primarily as a supplement to the amount that families are expected to contribute from their own current resources and savings. For example, if a family's expected contribution was $500 per month

(as computed with the ECE Need Analysis Methodology), but the price of the program they chose was $900 per month, they might be interested in obtaining a loan to pay the difference, assuming they did not receive grant aid.

Knowing that it is unreasonable to suggest that families with incomes below $30,000 borrow to pay for early care and education expenses, we looked at the characteristics of families with incomes above that amount. The approximate mean and median family income for families with incomes above $30,000 was about $60,000. We first calculated how much a family that earned $60,000 could afford to spend on early care and education loan payments and followed by calculating how much a family that earned $45,000 per year could afford.

Banks and other lenders that participate in the Federal Family Education Loan Program (FFELP) have a rule of thumb that student loan payments should not exceed 8 percent of the borrower's gross monthly income before taxes. Because many parents of young children have had some college experience and, therefore, may be making payments on their own college loans, and because many are homeowners who are paying more than 30 percent of their monthly earnings on mortgages, we decided it would be better to calculate the maximum payment ratio for early care and education loans at 6 percent of gross monthly earnings. That amount is $300 for a family earning $60,000 per year ($60,000 divided by 12 months equals $5,000 per month, times 6% equals $300). For a family earning $45,000 per year, the maximum amount is $225 per month ($45,000 divided by 12 equals $3,750 per month, times 6% equals $225).

So how much could these families afford to borrow? The answer depends in large part on the interest rate and term of their loans. When interest rates are lower and the time allowed to repay the loans longer, the principal amounts borrowed can be higher.

The focus group results indicated that low interest rates were a critical condition for parents to even consider borrowing for early care and education expenses. If loans are to offer low interest rates, they must come from a program that subsidizes them. It was assumed that subsidized interest rates would fall somewhere between 6 percent and 8 percent, because this has been the historical experience in loan programs for college students. College students have 10 years — sometimes longer — to repay their loans. The focus group participants thought five to seven years was as long as they would consider repaying loans for early care and education, in part because parents would want to begin saving for college expenses for their children.

We wanted to estimate how much parents could afford if the government offered them the three kinds of subsidies available through student loans — covering their payments if they defaulted, died, became disabled or went bankrupt; supplementing their interest payments (either by making supplemental interest payments to private lenders or forgoing some earnings on interest if the government makes the loans); and subsidizing their payments by paying their interest while their children were in early care and education and the parents cannot afford to make payments. The PLUS program does not pay interest on loans to parents while their children are students. It would cost taxpayers a great deal to support such payments. Most parents are working and can afford to make payments, and there is little political support for providing government subsidies to PLUS borrowers, many of whom have above-average incomes. For these reasons, we assumed that an early care and education loan program would also require parents of young children to pay interest while their children were enrolled in early care and education.

The parents could pay the interest charges in three ways: (1) begin loan repayment immediately after getting their loans by making payments on both interest and the principal as they are amortizing their loans; (2) make interest-only payments while their children are in early care and education and then start making payments on

principal and interest when early care and education is no longer needed, and (3) capitalize the interest payments by adding them to the loan principal while their children are in school and then making payments on the combined amounts after early care and education is no longer needed.

We believe it would be very difficult for many parents to make loan payments on both the principal and interest while they were making payments for early care and education expenses. Since it would cost parents much more to repay loans if they capitalized the interest while their children are in early care and education, we focused on how much parents could afford to borrow if they paid the "in school" interest as it accrues and then started repaying their loan principal and interest when their children enter kindergarten or elementary school.

Because the focus group parents said they would want to repay any early care and education loan in no more than five to seven years, and they wanted subsidized interest rates, we estimated the maximum amounts parents could afford to borrow under three interest rates and three different terms of repayment. Here is how much the family earning $60,000 could afford to borrow.

Maximum loan amount for families with $60,000 incomes

Months to Repayment:	60 Months	72 Months	84 Months
Interest Rates			
Six Percent	$15,400	$18,100	$20,500
Seven Percent	$15,100	$17,600	$20,000
Eight Percent	$14,800	$17,000	$19,200

At a price of $800 per month per child for early care and education, the $20,500 maximum amount above would pay for just under 26 months of services ($20,500 divided by $800 equals 25.625). That would mean that one child's expenses could be covered for just over two years and two children's expenses could be covered for 13 months. But let us assume that the parents making $60,000 can afford to pay $500 per month for early care and education services. This means they would only need to borrow $300 to meet the full charges. Now, with the maximum $20,500, they could afford to purchase more than 68 months of services ($20,500 divided by $300 equals 68.33). This would be more than enough months to cover all years from age 0 through 5. So borrowing to pay for early care and education might be feasible for the family earning $60,000 per year and with one child under age five.

What do the calculations say for a family earning only $45,000? See the estimates below. At a price of $800 per month per child, the $15,400 maximum amount would pay for 19 months of early care and education services ($15,400 divided by $800 equals 19.25). One child's expenses could be covered for just over a year and a half. A family of four with one child of early care and education age and earning $45,000 can afford to pay less than $200 per month for early care and education expenses. Such a family would need to borrow $600 per month to meet the estimated $800 charges. Their borrowed $15,400 would help them afford just under 26 months of early care and education expenses ($15,400 divided by $600 equals 25.66). This would hardly be enough to get one child through five years of early care and education.

In addition to not being able to afford payments on a huge amount of loan money for early care and education expenses, there is another

Maximum loan amount for families with $45,000 incomes

Months to Repayment:	60 Months	72 Months	84 Months
Interest Rates			
Six Percent	$11,600	$13,500	$15,400
Seven Percent	$11,400	$13,200	$15,000
Eight Percent	$11,100	$12,800	$14,400

important disadvantage to borrowing — the total cost of repaying loans plus interest. To illustrate this disadvantage, we assume that the family earning $60,000 per year borrows one-fifth of the affordable amounts noted above for five consecutive years, pays the interest as it accrues, and then begins making payments on the interest and principal at the end of the fifth year.

The family that can borrow $20,500 at 6 percent to be repaid over seven years would borrow $4,100 each year ($20,500 divided by five equals $4,100). They would pay 6 percent interest each year, so their annual interest costs in the first year would be $246 (6% times $4,100 equals $246). In the second year, their annual interest costs would double, to $492, because they would now have borrowed $8,200—$4,100 for each of two years. By the third year, their annual interest charges would be $738 (6% times $12,300); by the fourth year, $984 (6% times $14,480); and, by the fifth year, $1,230 (6% times $20,500 equals $1,230). By the end of the fifth year, the parents would have paid $3,690 in interest for the $20,500 they borrowed, and they would not yet have paid anything on their loan principal. If they take seven years to repay their total loan amount at 6 percent interest, it will cost them another additional $4,600 in interest payments.

Thus, after paying the accruing interest for five years while their child was in early care and education and making payments on interest and principal for seven years, these parents will have made about $28,800 in loan payments in order to have $20,500 to spend on early care and education. Put another way, they will have increased their early care and education expenditures by $8,300 more than they would have paid had they not borrowed.

Cost of borrowing for families with $60,000 incomes

Months to Repayment:	60 Months		72 Months		84 Months	
Interest Rates	*Borrowed*	*Repaid*	*Borrowed*	*Repaid*	*Borrowed*	*Repaid*
Six Percent	$15,400	$20,700	$18,100	$24,900	$20,500	$28,800
Seven Percent	$15,100	$21,100	$17,600	$25,300	$20,000	$29,500
Eight Percent	$14,800	$21,600	$17,000	$25,600	$19,200	$29,800

Depending on the interest rates, the parents who take five years to repay their early care and education loan, after paying accruing interest when their child was in early care and education for five years, will spend between $5,300 and $6,800 on interest, depending on their loan interest rate. The parents who take six years will spend between $6,800 and $8,600, and those who take seven years will spend between $8,300 and $10,600 on interest. So if the families borrow as we have illustrated in these examples to pay for early care and education expenses, their interest payments will be equivalent to between six and 13 months of early care and education expenses at our assumed cost of $800 per month.

This analysis suggests that families with at least $60,000 annual income might find borrowing to pay for early care and education feasible under low-interest circumstances. Some families might find long-term, low-interest loans preferable to their current means of paying for early care and education with credit cards (or by paying for other essential purchases with credit cards in order to pay cash for early care and education). If we assume that families with incomes above $100,000 would not be good loan candidates, because many

Families with children under age six

Types of Families	Number	% of Families with Incomes of $60,000-$99,999	% of All Families
Married Couples	1,499,000	95.8%	17.3%
Single Fathers	29,000	1.9%	0.3%
Single Mothers	36,000	2.3%	0.4%
All Families	1,564,000	100.0%	18.0%

would be able to pay for early care and education charges from current income, then the number of families with annual incomes between $60,000 and $99,999 would be about 1.5 million (as indicated above).

Given the resistance to borrowing expressed by the focus group parents, and given the fact that not all of these families have children who are participating in paid early care and education, we guessed that up to 20 percent might, *under some circumstances*, wish to get loans to help them pay early care and education charges. That would represent about 313,000 families. If they borrowed $4,800 each year (about half of an estimated $9,600 in charges for high-quality early care and education), then the annual loan volume would be about $1.5 billion per year.

The feasibility of establishing a loan program

Would $1.5 billion per year represent a large enough demand (or market) to make it feasible for government and/or private lenders to establish an early care and education loan program? Possibly, under some conditions. We know from the experience of college student loan programs (and PLUS loan programs) that it is expensive to administer education loan programs. It costs a great deal to develop and maintain loan-administration software and hardware and to pay for loan servicing. We also know that lenders who provide private capital for federal student (and parent) loans make well under 1 percent profit on their investments. To minimize per-loan costs and maximize loan profits, the government and private lenders must achieve economies of scale. Therefore, for an early care and education loan program to be feasible, it would have to serve relatively large numbers of borrowers and involve substantial average loan balances as well as annual loan volumes.

The PLUS program as operated under the FFEL Program currently serves about 320,000 borrowers annually who borrow about $2.5 billion. The average annual loan is just under $8,000. Private lenders provide the capital for these federal loans. Thus, it appears that the estimated 313,000 early care and education loan borrowers and $1.5 billion annual loan volume could be large enough to make an early care and education loan program feasible. It is unlikely that private lenders would see this potential early care and education loan market, which is spread over a 50-state area, as worth the expense of developing all new systems and an administrative structure to make and service early care and education loans.

However, if the federal government were to modify the PLUS loan program and make its loans available to parents to pay for early care and education expenses, some lenders that now participate in the PLUS program might decide to make early care and education loans — if they could do so without major modifications to their PLUS loan servicing systems. The private lenders would, of course, need the subsidies offered by the

federal government before they could make loans at an interest rate low enough to meet the parents' repayment needs.

Thus, it is economically and administratively feasible that an early care and education loan program could be funded and operated to serve some portion of all middle- and upper-middle-income families. Whether it is politically feasible is beyond the scope of this research.

There is a second method of offering long-term, low-interest early care and education loans to parents that may be feasible: State governments could fund an early care and education loan program and administer it through the guaranty agencies that currently operate in the FFEL Program. These agencies have loan servicing capabilities that could be applied to early care and education loans, if the loan capital were available. It is conceivable that states could get the loan capital from private lenders by insuring the lenders against losses due to default, death, disability and bankruptcy, and by assuring them some interest rate of return. This way, the lenders, rather than taxpayers through appropriations, would be providing the capital for a state early care and education loan program. The states could also raise the loan capital by selling revenue bonds.

A major drawback to a state-operated early care and education loan program is that the estimated number of borrowers served would be small. Based on our assumption that there might be 313,000 early care and education loan borrowers nationwide, it seems unlikely that more than 50,000 of these families would be in any one state. Whether a potential demand from 50,000 families is sufficient to propel state governments to consider funding an early care and education loan program is unknown.

Another way to borrow for early care and education expenses is for parents to get second mortgages on their homes, as many parents of college students do. The interest on these loans would be tax-deductible, which would cut the costs. However, since just over half the parents in the census data had homes, and their average equity was approximately $30,000, it is unlikely that this source of borrowing is viable for huge numbers of families.

Conclusions

It appears that using long-term, low-interest loans to help parents pay for early care and education represents a viable strategy for only a limited number of families with young children. To be feasible, such loans would have to be subsidized and guaranteed. If the federal or state governments were to modify current higher education loan programs to allow borrowing for early care and education, this may attract the participation of private lenders and allow for cost-effective loan servicing. However, unless parents view the price of high-quality early care and education as an investment in their children's future, the demand for early care and education loans is likely to be minimal. Thus, the ultimate feasibility of loans rests not only on willing lenders, the government's backing and administrative capacity, but also on parents' perceptions of the value of early care and education and their willingness to borrow.

Over time, as support for early care and education grows and quality increases, there may be enough demand to justify the development of a loan program, particularly if prices were to rise significantly. A well-targeted early care and education loan program could help some families pay for high-quality early care and education during the years that these expenses exceed families' ability to pay, allowing loan repayment and college savings to begin during the elementary school years when child care expenses generally decrease.

Additional information

A technical report on the loan research is available from Lumina Foundation for Education.

Cultivating new sources of funds for families and programs: Community endowment funds for early care and education

Objective 4: Determine the feasibility and design features of community early care and education endowment funds as a source of financial aid for families and direct support for programs.

Helen Monroe is the author of this section

Purpose

Our purpose was to investigate the feasibility of establishing community-based endowment funds as a source of revenue for direct support to early care and education programs and financial aid for families. In studying the potential of endowment funds to generate revenue for these purposes, we also sought to identify critical elements essential to the success of such funds. We hired a consultant with endowment expertise to address these questions:

- What factors in a community would make an endowment fund a feasible strategy for generating revenue for early care and education programs and financial aid for families?
- What design features would be critical to the success of a community early care and education endowment fund?
- What steps should a community take to assess the feasibility of establishing an early care and education fund?
- What steps should a community take to establish an early care and education endowment fund?
- What resources are available to communities interested in establishing endowment funds?

Higher education strategies

Endowment funds managed by higher education institutions provide revenue for both program support and financial aid. Alumni, businesses and philanthropists contribute to these funds to ensure that the institution will continue to provide its unique brand of education and services to the community.

Gifts to endowments typically include stocks, bonds, cash and real estate. The gifts consist of the endowment principal from which investment income is derived; the gifts themselves may not be spent. Revenue from endowment earnings varies significantly — not only between public and private sectors, but also within each sector. In public institutions, endowment income represents less than 1 percent of revenue for education and general expenses, but it is nearly 7 percent in private institutions. However, these averages conceal large disparities in wealth in both sectors. In truth, the bulk of endowment assets are concentrated in just a small fraction of colleges and universities. Yet, even schools with small endowments benefit from having this additional source of revenue.

As endowment funds increase in value over time, they can return greater annual earnings, and this accelerates when large gifts are added. Generally, endowment income that colleges designate for current-year expenditures represents about 5 percent of the total endowment principal. Some institutions will draw more for capital expenditures, and others follow more or less restrictive guidelines in spending endowment income. The funds allow institutions to invest in quality in a variety of ways — among them, purchases that enhance educational offerings and financial aid to enhance student diversity.

Colleges have to spend money to raise money. Nearly every public and nonprofit institution has a development office with professional staff to cultivate charitable giving — including gifts to endowments. One organization, the Council for Advancement and Support of Education (CASE), is

dedicated to assisting colleges succeed in their development efforts. In addition to the resources and training opportunities it offers, CASE also helps colleges reach new potential donors with its *Guide For Giving To Educational Institutions*. The guide, which includes profiles of colleges, universities and private elementary and secondary schools, is used by estate attorneys, financial advisers, planned-giving advisers and other professionals in assisting their clients to reach decisions about where to direct their charitable dollars.

Adaptation of higher education strategies

Several lessons are clear. First, if the early care and education community can attract major donors and establish endowment funds, these could grow in value and supply sorely needed revenue to support program quality or provide financial aid to families. Second, while endowment earnings may play only a minor role in an overall plan for early care and education finance, it is an important long-term strategy to increase revenue and diversify income sources. A third lesson is to have visible, financially viable and dependable early care and education entities that can attract charitable giving. Finally, it is evident that skilled development professionals, with an adequate budget to support their activities, are needed for building endowment funds. Knowledge and expertise in planned giving are key to courting potential donors and securing donations.

As public awareness about the value of early care and education increases, more philanthropists may well be persuaded to invest in the "futures" that are nurtured in early care and education programs. Donors to endowments typically seek stable organizations that will use their contributions to make a difference for generations to come. Thus, how early care and education organizes itself to establish endowment funds could be critical to success in this arena.

Establishing endowment funds at every early care and education program is an unlikely strategy, considering the large numbers of programs, the relatively small number of children served at each and the development and administrative expertise and expense required for each endowment fund. One alternative is a communitywide early care and education endowment fund spearheaded by an umbrella organization that serves as the "hub" for early care and education finance, distributing endowment earnings as financial aid for families or as support for early care and education programs to achieve and sustain high-quality standards. This structure could allow family child care programs and for-profit centers to participate along with the nonprofit centers that currently qualify for charitable donations based on their tax status. This and other ideas for endowments deserve exploration so that Americans will have clear and compelling options for making gifts to early care and education that can produce enduring benefits to society.

Overview of findings

Endowment Development Institute, a California-based firm, was engaged to: assess the feasibility of establishing community endowment funds for early care and education; describe essential elements to be included in such funds; and recommend next steps for research and/or action. Key points identified by the institute are highlighted in this summary.

The challenge of endowment fund raising

Raising endowment gifts is generally more challenging than raising money for services. An endowment gift is much less tangible than donating to current programs and activities and may have less pull on the heartstrings. As a gift for the future, it does not provide donors with immediately visible results.

Yet, available evidence suggests it may be more feasible now than ever to build community-based endowments to support early care and education. More people appreciate the importance of the

early years and the critical role that high-quality early care and education can play. Also, people are increasingly familiar with the concept of an endowment and understand the beneficial role of charitable giving in personal financial and estate planning — especially in relatively good economic times.

Building a broad-based community early care and education endowment presents challenges, however, largely because there is limited experience with such funds to date and few models to follow. At the same time, based on knowledge of and experience in raising endowments for organizations generally, the challenges associated with establishing an endowment are both identifiable and surmountable.

The following sections describe the common elements and conditions of endowment-building, suggest models for early care and education endowment funds, identify critical issues to consider in assessing the feasibility of an endowment, and discuss reasonable expectations for endowment revenue. Next, we outline the steps for launching an endowment fund and note some resources available to assist in the process. We close with recommendations for further pursuing the concept of developing community endowment funds for early care and education.

Endowments by function

Endowment: Assets to be used as permanent capital invested to produce income.

Time endowment: Funds restricted by donors for use as permanent capital to invest in order to produce income. Only the investment earnings may be used.

Quasi-endowment: Funds designated as endowment by a governing board resolution. Principal as well as earnings may be designated for use by the board.

Common elements and conditions

Endowment-building efforts share many common elements, regardless of the nature of the cause. The most critical factors that inspire people to make endowment gifts are the level of their commitment to and personal interest in the cause or organization. The challenge, then, is to find those donors for whom the cause is important and then to engage them to understand the benefits an endowment can provide — for the cause or a specific organization and, potentially, for the donor as well.

Successful endowment building involves these essential elements:

- Donors committed to the organization or cause.
- Financial stability of the endowed organization.
- Demonstrated stewardship of charitable assets.
- Clearly stated goals for use of the endowment earnings.
- Excellent communication vehicles to reach donors.
- Knowledge of planned- and deferred-gift techniques.
- Patience while building endowments.
- Long-term commitment to the process.

Several conditions contribute to the successful development of an endowment:

- Financial security of the organization's operations to assure donors that it will survive to benefit from or distribute the earnings of the endowment.
- Commitment of the leadership, board and staff to work actively to build an endowment.
- Identification of prospective donors.
- Investment policies and procedures to assure donors of good stewardship of the assets.
- Clear definition of uses of the endowment.
- An identified group of potential beneficiaries (individuals or organizations).

Models for holding endowments

A community foundation is likely the best option for a lead organization to build a commu-

nity-based early care and education fund. Community foundations hold collections of individually endowed gifts for both specified and general use within a defined geographic area. The gifts provide a permanent pool of charitable capital to support a wide range of services, including education, health, social services, the environment, recreation and cultural programs.

Once stabilized with a large enough endowment to make them generally self-sufficient, community foundations are good candidates for building and holding broadly defined endowment funds. There are two types of funds within a community foundation that seem most appropriate for early care and education leaders to consider:

- *The designated endowment:* This fund identifies one organization as the automatic beneficiary of the earnings of the endowment as long as it maintains its charitable status and purpose. The designated organization has control over the use of the endowment earnings and primary responsibility for building the assets, but relies on the foundation for technical support.
- *The field-of-interest endowment:* This fund supports a named area of interest, such as early care and education. The endowment's earnings are distributed on a competitive basis among organizations that provide services in the field of interest. Assets are raised jointly by the foundation and potential beneficiary organizations. The foundation, often with support of an advisery committee with expertise in the area of interest, makes distribution decisions.

There are benefits and drawbacks to both types of funds. To maximize the benefits and minimize the drawbacks, it may be wise to consider combining these two types of funds in a community foundation — a course that is possible if an existing umbrella early care and education organization serves as the designated "hub," assisting with fund development and overseeing the distribution of the endowment earnings.

Assessing feasibility

In endowment fund raising, there is a close relationship among donors, organizations, programs and results. Community early care and education leaders or a group of early care and education organizations can assess the feasibility for establishing an early childhood endowment by examining several issues specific to their situation and geographic area.

In terms of community characteristics, there are no data to support whether rural or urban communities are more promising endowment areas. Small communities and rural areas may benefit from easier communication and involvement, while larger urban areas may benefit from access to more potential donors. Gifts to endowments come from donors of all financial capabilities and, thus, any community has the potential to establish a successful fund.

The following questions provide a starting place for assessing the feasibility of initiating an early care and education endowment fund for your community:

- Is there community consensus that an early care and education endowment is a priority need?
- Is there a community foundation serving the area?
- Do any of the early care and education organizations have endowments in the community foundation?
- Does the community foundation have a field-of-interest fund for early care and education?
- Do the prospective beneficiary organizations have a history of private donations, a list of current and past donors and the ability to communicate with them regularly?
- Who are the potential allies for the endowment, e.g., professional advisers, other endowment-building organizations, etc.?
- Are there any private foundations in the area (community, city, state or region) with an interest in early care and education that might provide a challenge grant to jump-start the endowment fund raising?

- Are there any lead donors who support early care and education and could be approached to consider a challenge grant?
- What help is there from the local community foundation or academic institutions to support the assessment of feasibility?
- How will costs of the feasibility assessment be covered?
- Who will take responsibility for organizing the effort?
- What organizations are willing to work collaboratively to achieve the desired results?
- How will the assignment of responsibilities be handled?
- What happens if some participant organizations do not assume their share of the responsibilities?
- Is there capability to develop an implementation plan, if appropriate, at the conclusion of the assessment?
- What costs are associated with the effort and how will they be covered?
- If collaborative leadership is to be established, how will it be carried forward after the current participants are gone?

Reasonable expectations for endowment revenue

It is important to be realistic about what an endowment can provide. The amount of revenue generated annually will depend on several factors but, fundamentally, it will be determined by the amount of capital raised and the fund's investment performance.

Endowment goals are generally based on the desired annual income from the endowment. The commonly accepted practice is to spend 5 percent or less of the endowment value on an annual basis. It is computed as 5 percent of the current market value of the principal based on annual total return. This basic information is the key to calculating the required size of an endowment to meet a specified goal. It can be expressed in a formula as:

Annual endowment income goal x 20 = Endowment principal goal

For example, if a community with 10 early care and education programs wishes to allocate an average of $50,000 to each program as general support, the endowment principal would need to be $10 million to reach the goal of $500,000 in annual earnings: (10 x $50,000) x 20 = $10,000,000.

Conversely, if you can estimate a realistic amount to be raised in an endowment campaign, based on an assessment of your community, you could identify the amount of income this will produce simply by multiplying as follows:

Endowment principal goal x .05 = Annual endowment income goal

For example, if you believe the total amount you can raise in your community is $2 million, you could expect earnings of $100,000 annually ($2 million x .05 = $100,000), and plan how best to allocate this amount to have the maximum impact among the early care and education priority needs in your community.

Goals are often unrealistic, however, or may take several years to reach. Community foundations, for example, may take five years to raise $5 million to $10 million in building a general community endowment for health, welfare, education, culture, recreation, environment, etc. It is more realistic to define the early goal based on total assets in the fund over a defined period. For example, $50,000 would be a reasonable annual income goal after raising $1 million over five years. Planners should assess the likelihood of achieving endowment campaign goals, the time that it will take to reach those goals and the amount of resources — time and people — available for building the endowment.

Establishing an early care and education endowment

The following steps outline the process of launching an early care and education endowment in a community served by a community foundation:

- Contact the community foundation to inquire about the level of support it offers for the

development of a field-of-interest or designated fund. Some foundations will be very supportive and lead the endowment-building effort, while others will hold the endowment but not take part in raising funds.

- ☐ Determine whether to establish a *designated* or *field-of-interest* fund or a combination of the two, and assemble the likely participants to build the fund.
- ☐ Set a three-year goal to reach the desired amount of the endowment.
- ☐ Seek a challenge grant to encourage initial gifts to the fund.
- ☐ Educate the full board of each of the participating organizations and assign responsibilities. (This is a task that a steering committee often undertakes.)
- ☐ Determine if separate staff for the fund is needed and, if yes, discuss this with the community foundation.
- ☐ Ensure that the community foundation provides all necessary information on investments, handling of gifts and making individual presentations about planned gifts.
- ☐ Establish a plan for ongoing efforts to build the endowment.

If there is no community foundation in the area, the process gets started with the following steps:

- ☐ Examine possible alternatives for building and managing a new endowment, including the advantages and disadvantages of each, e.g., using an existing umbrella organization, designating one organization to serve as an umbrella agency for the effort, starting a new organization, or establishing multiple funds managed by different organizations. It is critical that the organization holding the endowment have appropriate expertise and knowledge of endowment investments, policies, procedures, operations and restrictions.
- ☐ Identify leaders for this effort. A hired consultant may help in this situation because staff are often too busy with their own organizations. In this case, the best solution is to hire a local permanent staff member who can learn the responsibilities from an endowment consultant who functions as trainer and guide for the process. The need for permanent staff is highly likely if there is not a collaborating community foundation.

Regardless of where the endowment is held — a community foundation or another nonprofit organization — the processes and procedures should become standardized over a three-year period. Thereafter, growth in the principal should become more apparent. Successful endowment growth is a long-term development activity. One of the most important conditions for success is persistence of effort through a regular program of contact, solicitation and follow-up.

Resources for building endowments

The primary resources for building endowments are individuals who are strongly committed to the cause. While private foundations and government funds are available and should be targeted, they are not often a source for endowment gifts. A notable exception is the "challenge grant" that some foundations will provide to stimulate other gifts.

Initially, there is considerable research needed, and volunteers may be able to help. Begin by talking with people who support the cause to determine their commitment to the endowment concept and potential for support. Frequently, an outside consultant does this feasibility study; however, local people talking among their own donors and colleagues can be equally effective and far less costly.

The cooperative nature of the effort will help to present a strong case to potential funders. Particularly if there is not an established community foundation, the planning group may have surprising appeal to foundations that favor collaborative efforts.

Valuable information for planners is available from numerous organizations, including the

following:

- The *Association of Fundraising Professionals*, a national membership organization with 157 chapters, advances philanthropy through advocacy, research, education and certification programs. Telephone: 703-684-0410; Web site: http://nsfre.org
- The *Center on Philanthropy at Indiana University* increases the understanding of philanthropy and improves its practice through programs in research, teaching, public service and public affairs. Telephone: 317-274-4200; Web site: http://www.philanthropy.iupui.edu
- The *Foundation Center*, a national nonprofit organization, is a source of general information about philanthropy and provides materials to help identify national and regional foundations. Telephone: 212-620-4230; Web site: http://fdncenter.org
- The *National Committee on Planned Giving*, a professional association for gift-planning professionals, provides educational opportunities for people whose work includes developing, marketing and administering charitable planned gifts. Telephone: 312-269-6274; Web site: http://www.ncpg.org

Next steps

In recent years, the economic climate has been highly supportive of endowment gifts. At no other time in our nation's history has there been a larger number of younger wealthy people. Many of these individuals are actively engaged in philanthropy and are eager to move from enjoying making money to experiencing the significance of using it to find solutions to societal problems. These characteristics bode well for the future of engaging wealth in this country in support of excellence for early care and education.

The concept of an early care and education community endowment fund has potential as a long-term strategy for generating revenue for early care and education in communities throughout the nation. Careful planning and testing will help early care and education leaders to develop reasonable expectations about the role such funds could play in an early care and education finance system. As part of the effort, it will be important to explore different endowment models and compare endowment-building strategies. In addition, results from the early care and education endowment funds currently underway can eventually inform new efforts.

A unique early care and education endowment model would combine the features of a field-of-interest fund and those of a designated fund. In this design, a community foundation would hold the endowment and provide annual earnings to a designated community agency — for example, an organization that serves as the community's hub for the early care and education system. The designated agency would be responsible for distribution of funds as financial aid to families and support to programs that participate in the system. Such a model would require a strong existing agency that has the support of the early care and education community to serve in this capacity. This and other models of community endowment funds, once established, could be one source of revenue in a coordinated early care and education finance system, along with other finance strategies being adapted from higher education.

Additional information

The report prepared by Endowment Development Institute provides additional details about assessing the feasibility of establishing a community endowment fund for early care and education, considerations in its design and key factors for success. It is available as a technical report from Lumina Foundation for Education.

Exploring cost, subsidies and price in higher education

Objective 5: Investigate higher education methods of determining full cost and establishing a tuition price. Identify strategies with potential for adaptation by early care and education programs.

Purpose

Our purpose was to learn how higher education institutions address cost and price issues to determine if their finance approaches could inform early care and education practices. In particular, we wanted to know how institutions determine the full cost of operations, seek and apply subsidies to reduce those costs financed by student tuition, establish a full tuition price and use aid to lower the net price to students.

Higher education strategies

This section summarizes key higher education finance issues, outlines the diverse institutional characteristics that affect sources and uses of revenue and explores the potential significance of higher education finance approaches to early care and education finance. This summary is not comprehensive, however. It was not possible within the scope of the project to explore every relevant issue. Instead, the summary provides an introduction to ideas that warrant closer examination and discussion. For additional information on these topics, please refer to the resource list at the end of this section. A short glossary of specific finance terms is also included.

The nature of the enterprise

The following data offer a snapshot of higher education:

- There are nearly 3,700 accredited, degree-granting higher education institutions in the United States that enroll more than 14.5 million students.
- There are nearly equal numbers of public and private nonprofit schools; for-profit schools represent less than 10 percent of the total.
- More than 60 percent of all these schools are four-year colleges and universities that enroll about 62 percent of the student population. Most students — 77 percent — attend public institutions; 20 percent attend nonprofit institutions, with half in religiously affiliated schools; and the remaining 3 percent attend for-profit colleges.

There are as many differences as similarities among higher education institutions, including their policies and practices regarding revenues, costs, subsidies and prices. The finance strategies that colleges use depend a great deal on the different economic circumstances they face. Their financial characteristics and related data are tracked by the National Center for Education Statistics (NCES) in the U.S. Department of Education. NCES compiles data gathered from an annual finance survey, conducted as part of the Integrated Postsecondary Education Data System (IPEDS). These data help to monitor the financial condition of postsecondary education and promote research on institutions' income, expenditures, assets and liabilities. The survey also tracks information about faculty salaries and student scholarships.

Sources of revenue

While colleges receive income from multiple sources, examining two major categories — tuition and fees revenue and non-tuition revenue — helps to illuminate key issues that affect pricing decisions in higher education.

Non-tuition revenue from various public and private sources offsets operating costs, effectively lowering the amount that needs to be collected in tuition and fees. For this reason, non-tuition

revenue is referred to as "subsidy" in higher education. On average, tuition and fees represent only 23 percent of revenue in public institutions and 53 percent in private colleges. In for-profit postsecondary schools, tuition and fees represent an average 84 percent of revenue.[21]

Both public and private colleges depend on non-tuition revenue subsidies, but their primary sources differ. State appropriations — taxpayer money — provide the most non-tuition support for public colleges. In private nonprofit higher education, revenue from private gifts, grants and contracts is equally important as support from federal research grants and contracts. Private colleges in a number of states also receive some revenue from state appropriations, often when it is more cost-effective to rely on private colleges to offer a course of study than to provide it in a state college.

Differences and disparities

The differences in the dominant sources of subsidy for public and private institutions tell only part of the story. Sources of non-tuition revenue vary substantially even within sectors and subsectors of higher education. For example, while both two- and four-year public institutions receive the majority of their support from state funds, local government appropriations are far greater for two-year colleges. In four-year institutions, income from endowments, private gifts and federal grants and contracts represent a larger proportion of the subsidy. Endowment income typically is greater for private than for public four-year colleges. But only a small number of private colleges have sizable endowments from which to derive income. Others must rely to a much larger extent on annual giving.

Additionally, there are significant state-by-state differences in the level of support for public institutions and in the sources of support for private colleges and universities.

Costs

In college and university budgets, major expenditures are for instruction and for the two other primary missions of higher education: research and public service. Other expenditure categories include academic support, student services, institutional support, operation and maintenance of the physical plant and scholarships.

Instruction claims only 28 percent of the budget in four-year schools, but 44 percent in two-year schools, where research costs are negligible. Salaries and wages are the largest instruction expense. In two-year colleges, salaries are 61 percent of all education and general expenses.

The total costs of any enterprise include both explicit expenditures and implicit costs. Implicit costs, rarely calculated in determining the full cost of higher education, include foregone interest on funds that are invested in buildings rather than in financial markets. Despite the difficulty of measuring implicit costs, they must be considered in evaluating educational finances.

It is useful to think of costs not only as the full cost of providing education, but also in terms of average cost and marginal cost. Average cost refers to cost per unit of output — in this case an institution's costs divided by the number of students being served. If the price charged is less than the average cost, there will be a deficit unless there is revenue from sources other than tuition.

Marginal cost refers to the extra cost of producing one additional unit of output — in this case, the increase in costs resulting from enrolling one more student. In many colleges and universities, marginal cost is very low because they have excess capacity (e.g., classes and dormitories can accommodate one more student.)

Full cost depends to some extent on the institution's mission and goals as well as available revenue and size. Decisions about quality affect not only total costs, but the distribution of the subsidy among competing goals of quality and access. Greater expenditures, when well targeted, can improve the quality of education offered. In all but the wealthiest colleges, investments in improved quality mean less subsidy to improve access through lower prices and aid to individual students.

Because of rapidly rising prices and concerns about affordability, colleges have been working hard to control costs in recent years. Some critics contend that institutions will increase costs to spend whatever funds are available. On the other hand, others are concerned that inadequate levels of compensation and other money-saving measures will erode the value of the educational offerings.

Price and subsidy

The relatively low proportion of revenues from tuition and fees demonstrates that college students do not pay the full cost of their education. The difference between the price paid by students and the actual average cost of education (including implicit costs) constitutes a subsidy. Due to major disparities in the resources available to institutions, students may pay a similar net price at two different schools, but they may receive vastly differing levels of subsidies, reflecting a greater or lesser investment in facilities, equipment, faculty and students — all of which affect quality.

Non-tuition revenue = Subsidy

Cost – Price = Subsidy

Subsidy (Non-Tuition Revenue) = General Subsidy + Individual Subsidy

Sticker price is the published tuition price—the full price before any discounts or student aid is given.

Average Cost – General Subsidy = Sticker Price

General subsidy and individual subsidy

Almost all college students receive significant subsidies. Institutions allocate the subsidies, provided by non-tuition revenue, in two forms: (1) a general subsidy used to lower the price of education to all students and (2) price discounts or aid to reduce the price for individual students. Depending on their differing goals and resources, institutions make these allocations in varying proportions.

General subsidy

In public institutions, the largest part of the subsidy is in the form of low tuition for all students. State appropriations are the main source of financing for this general subsidy. In private colleges, the sticker price is higher, but still rarely covers the cost of education. Private contributions are the main source of general subsidy, in addition to some degree of public funding.

Individual subsidy (tuition discounts and aid)

In the private college sector, 11 percent of expenses are devoted to scholarships and fellowships, which are provided as price or tuition discounts. By granting tuition discounts, institutions essentially practice *price discrimination* — charging different students different prices to attend, either based on financial need or on other student characteristics. Public institutions also provide individual aid of this type, but to a much lesser degree — only 4 percent of expenditures.

Other student aid

The general and individual subsidies provided by non-tuition revenue, as discussed above, do not include financial aid to individual college students provided by the federal and state governments. These subsidies, available in both public- and private-sector institutions, take the form of grants, loans or subsidized work (work study). Designated specifically for financial aid, these restricted funds are treated as tuition and fee revenue and revenue for room and board — an auxiliary enterprise.

Setting prices

The availability of non-tuition revenue creates options for colleges and universities in setting their sticker prices. Price decisions rest on several factors, including the amount of available revenue, the institution's policies for allocating general and individual subsidies, economic indicators and the institution's ability to remain competitive in a particular student market.

A critical factor in college pricing is the existence of a financial aid system that is capable of equitably assessing families' ability to pay. This lets many institutions set a sticker price independently of perceptions of affordability, because it is well known that students (and their families) can apply for financial assistance and receive need-based aid.

One commonly used strategy involves setting different prices within an institution. Public colleges usually have a pricing differential based on in-state or out-of-state residency status. Prices for graduate and specialized programs frequently differ from those for undergraduate programs, in part to account for higher program costs.

Student market demand for higher education is a very important factor in setting a price. Colleges are keenly aware that sensitivity to price affects applications and enrollments. Keeping an eye on the bottom line, colleges seek to accommodate eligible applicants unable to pay the sticker price while also attracting other students who are both able and willing to pay the full sticker price, thereby increasing net tuition revenue. Both public and private colleges attempt to manage demand and enrollment with a variety of pricing and discounting strategies. The most common approaches in each sector are described below.

Colleges attempt to manage demand and enrollment with a variety of pricing and discounting strategies.

Public institutions: low tuition/low aid

The prevailing approach in the public sector is to establish low tuition prices for all students. Lower sticker prices have the advantage of making institutions more competitive and more affordable for all potential students. However, lower tuition results in low availability of need-based aid for individual students, because the appropriations are concentrated in the general subsidy.

Sticker prices have risen at public colleges in recent years as state legislatures have decreased appropriations in the face of declining general revenues and competing budget priorities. At the same time, individual aid has not appreciably increased to maintain access for the lowest-income students.

Some higher education policy analysts advocate moving toward a high-tuition/high-aid policy in public colleges and universities. They reason that low tuition, subsidized by general subsidies, is enjoyed by all students, many of whom can afford to pay a much greater share of the full cost of their education. Subsidies to individual students can be more effectively targeted, thereby increasing access to education for students with more limited resources.

Potential inequities in the low tuition/low aid strategy were underscored in a landmark study in the late 1960s. The study revealed that low sticker prices at the University of California subsidized high-income students with taxes paid by low-income residents.[22]

Private institutions: high tuition/high aid

Private institutions generally set high tuition prices, but offer more financial aid to individual students in the form of tuition discounts. Higher sticker prices often generate more revenue, creating opportunities for more generous subsidies to individual students who are unable or unwilling to pay the sticker price. It should be noted that the full sticker price is almost always lower than the full cost of education. Consequently, students who pay the full price are not subsidizing other students; they are just receiving relatively lower subsidies.

Rare exceptions to this pattern are the financially poorest schools that rely primarily on tuition and fee revenue. These colleges sometimes charge students more than the per-student cost and use the excess to offer discounts to other students — a "Robin Hood" approach that allows cash-strapped colleges to attract students who otherwise would not or could not attend.

For the more selective colleges, market position and the competition for students by peer institutions also play prominent roles in pricing decisions. As price and prestige have become entangled, sticker prices and discounts have escalated at a growing number of colleges. This has created a growing gap between net tuition revenue — the amount actually paid by students — and the full sticker price.

Private colleges are frequently criticized for their high sticker prices. These prices may make education appear unaffordable and discourage some people from applying. Yet, if prices are discounted according to ability to pay, the high sticker price should actually increase access because it allows subsidies to be directed to those who most need them. However, as the discount rate has grown in recent years, a significant portion of this increased student aid is not distributed based solely on financial need and, thus, has not increased access.

Tuition discounts and enrollment management

Whether the sticker price is initially set high or low, it is rarely collected from all students on a campus. Instead, it frequently is a starting point for offering need-based financial aid and other tuition discounts, based on the institution's mission, enrollment priorities and the availability of non-tuition revenue to offset costs.

Price discounts, more prevalent in the private sector, are used for three primary purposes:

- *To provide need-based aid when other sources of aid fall short in assisting students who help the institution meet its goals of access and diversity.* Almost all private colleges offer this kind of discount to close or diminish the gap between a student's ability to pay and the price of attendance; public sector schools have fewer institutional resources to devote to need-based aid.
- *To attract students with desirable characteristics who are "able but unwilling" to pay the sticker price.* Colleges may seek star athletes or students with SAT scores in a range that could improve the quality of education for other students or that could enhance the school's profile and ratings in college guide books. In a sense, the discount pays for a service the student provides the school.
- *To increase revenue when full-paying students do not fill the seats.* Colleges that have excess capacity and are largely dependent on tuition revenue use this discount strategy.

The relationship between cost, subsidies and price

The dynamic interaction between the institution's goals and values and its financial resources results in decisions about prices and the uses of subsidies to achieve quality and access. The relationships among costs, subsidies and price can be summarized as follows:

- Average cost – general per student subsidy = sticker price
- Sticker price – individual subsidy = net price to student

(See the chart on Page 56.)

Adaptation of higher education strategies

Significant differences in resources distinguish early care and education from higher education, particularly the diversity of revenue sources and total amounts provided. Nevertheless, higher education finance concepts and policies suggest new ways for early care and education to approach a familiar problem. The contrasts in how subsidies are allocated and prices are structured are especially instructive.

Colleges set sticker prices that will, when combined with other revenue, cover the full educational costs. Two important factors allow them to do so. First, there is far greater public and private support for higher education and, second, they can count on a sophisticated financial aid system to identify and assist families that are unable to pay their sticker price. A third factor has recently come into play — a reliance on selectively discounting the sticker price to meet enrollment goals.

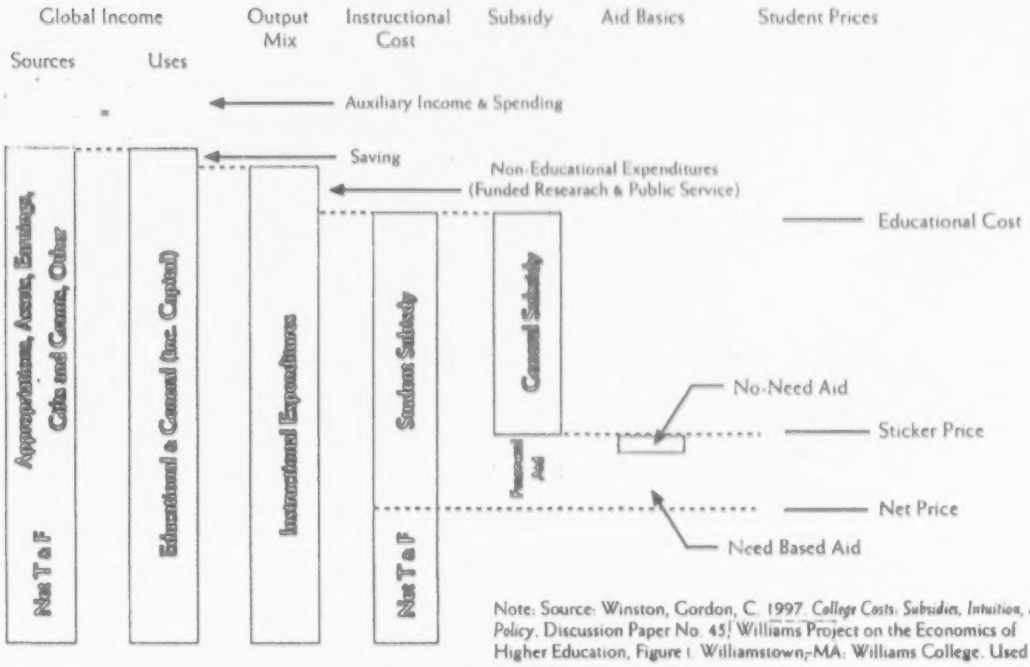
Even in the absence of adequate funding, early care and education programs, like colleges, must make decisions regarding cost, subsidies and price. Early care and education programs must weigh similar variables about quality, price and product competition. They must also decide how to assist applicants who are unable to pay the full price.

The "low tuition/low aid" approach of public colleges characterizes the prevalent approach of early care and education programs. Low early care and education tuition prices allocate a general subsidy to all families, regardless of financial need. Because non-tuition revenue is minuscule in most early care and education programs, this largesse relies on non-cash "hidden" subsidies, primarily the value of employee labor that exceeds the low level of financial compensation. The low tuition price may seem high to parents, but it is low in relation to full costs. Since the subsidy is hidden, however, the benefit is also hidden. Families do not know they are getting a $10,000 package of early care and education, for example, for the price of $5,000.

Basic dissimilarities between the two industries suggest that caution must be used in adapting policies from higher education to early care and education. For example, while a "high tuition/high aid" policy may work well in many communities, a larger general subsidy will be needed by early care and education programs in low-income areas to ensure a sticker price that matches the point of affordability for at least some of the area's families.

Moreover, demand for high-quality early care and education programs could diminish in the face of higher sticker prices, rendering this strategy untenable in the short term. While the nation values higher education, it does not yet fully value early care and education. As a result, parents may not be willing to pay a higher price, even if they are able. Over time, as parents and policy-makers

The economic structure of a college: Global income, costs, prices, subsidies and aid



Note: Source: Winston, Gordon, C. 1997. *College Costs: Subsidies, Intuition, and Policy*. Discussion Paper No. 45. Williams Project on the Economics of Higher Education, Figure 1. Williamstown, MA: Williams College. Used with permission.

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alike become convinced that high-quality early care and education is critical to good outcomes, demand should increase while price sensitivity decreases. Eventually, this should lead to allocation of greater resources for improving quality and access. To improve the quality of early care and education, non-tuition revenue must increase and reliance on labor subsidies must decrease.

In the meantime, setting a higher sticker price to maximize revenue could be a viable strategy for early care and education programs. It would involve gauging parents' ability and willingness to pay, coupled with stepped-up efforts to increase parents' awareness of the benefits of high-quality early care and education. Additionally, public funders and parents alike need a better understanding of the costs of producing high-quality early care and education.

Early care and education administrators have a vital role to play in promoting early care and education. They must understand and explain the consequences of cost and price decisions to their staff, their board, the public and policy-makers. Yet, few directors have had training in finance, economics and cost and break-even analysis. Moreover, no financial aid system exists to identify how much families are able to pay for early care and education. As public and private support for early care and education grows, it will become even more critical for directors to understand the options and trade-offs in the cost-subsidy-price-aid equation. Likewise, it will be important to have the support of an economically sound financial aid method and system.

Finally, it bears noting that the analysis of higher education finance is made possible by the extensive data system funded and maintained by the federal government. Nothing of this scope or scale exists for early care and education and the absence of data is a major hindrance to sound research and informed policy-making. This is another critical area in which early care and education could benefit from the model provided by higher education — and the considerable federal support that makes it possible.

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Glossary

Average cost = Cost per student; the total cost divided by the number of enrolled students (full-time equivalent).

Expended cost = Amount institutions spend to provide education and related services.

Full cost = The total cost of producing education, including all expended costs and implicit costs such as foregone income and donated space, goods and services.

General subsidies = Non-tuition revenue allocated to subsidize the cost of education for all students.

Implicit costs = Hidden costs not accounted for as expenditures, such as foregone income.

Marginal costs = The additional cost of producing one more unit of output i.e., educating one more student or providing ECE for one more child.

Net price = Total price minus grant aid or discounts.

Net tuition revenue = Amount of revenue received for tuition and fees, net of grant aid or discounts.

Non-tuition revenue = Revenue from other sources, government appropriations, endowment earnings, government grants and contracts, private gifts, grants and contracts, net revenue from sales and services of educational activities.

Price = The amount charged to or paid by students for education and related expenses.

Price differential = Variation in tuition prices in relation to costs and/or type of consumer.

"Robin Hood" approach = Setting the sticker price above the per-student cost and using the additional amount to provide financial aid to others.

Subsidy = Revenue from non-tuition sources used for general subsidies and individual student aid.

Sticker price = Published tuition price.

Tuition discounts = Individual subsidies for students, reflected in lower net prices charged to certain students.

Conclusions

The *Learning Between Systems* project set out to learn more about several higher education financing methods and consider how they could be adapted for use in a finance system for early care and education. In our view, higher education finance strategies, as a group, offer a compelling framework for early care and education.

The *Key Features* summary on the next page lists the components of the proposed early care and education financial aid system described in this report. While these components have been the primary focus of the *Learning Between Systems* project, a financial aid system is not in itself a solution to the quality and financing crisis that plagues early care and education. It must operate within the larger context of coordinated early care and education services with adequate funding and essential infrastructure supports. Our recommendations for key infrastructure components needed for a coherent early care and education system are summarized on Page 61.

We hope our efforts to adapt higher education finance methods for early care and education will contribute to the creation of a viable early care and education finance system. Cohesive and decisive action at both the national and state levels is crucial if we are to solve the crisis in early care and education quality and financing. We urge early care and education advocates and leaders to work together with federal, state and local policymakers to create an early care and education system that can deliver the American promise of equal opportunity to our nation's young children. That promise includes ensuring that each child has a good start in life through equitable access to high-quality early care and education.

The next page summarizes key features of the early care and education financial aid system.

Key features: early care and education financial aid system

Standard application form and processing

- One application collects information for all forms and sources of financial aid, including need-based early care and education services (e.g., Head Start, pre-kindergarten).
- Families may complete a Web-based or paper application form.
- Assistance available online, via a toll-free help line and at community financial aid offices.
- Annual application determines eligibility for all sources of financial assistance and early care and education services (with interim adjustments for changed circumstances that reduce a family's ability to pay).
- Centralized Web-based processing.
- Results sent to families and designated community financial aid agency or early care and education program.

Standard need analysis methodology

- Determines eligibility and expected family contribution (EFC).
- EFC = a percentage of discretionary resources (total income and assets – allowances).
- Basis for determining need for aid: *Price – EFC = Need*.
- Adjusts EFC when family has more than one child enrolled in early care and education.
- Formulas updated annually to adjust for cost-of-living changes.

Financial aid administration

- Community-based agency serves as hub for families, aid funds, providers.
- Families of all socioeconomic groups served by the same community agency.
- Conducts outreach to inform families of the benefits of early care and education and the availability of aid.
- Coordinates financial aid services with child care referral services.
- Verification of application information and family's circumstances.
- Identifies early care and education programs that meet criteria to participate in the system.
- Provides technical assistance to providers on fiscal management.
- Ensures early care and education programs' accountability with participation agreements.
- Manages aid funds from public and private sources.
- Packages aid funds from different sources to address families' demonstrated need.
- Makes payments to programs on behalf of families.
- Collects data about need for aid and extent to which need is met.

Early care and education programs

- Meet quality and accountability standards (e.g., accreditation) to participate in financial aid system.
- Seek and obtain funding to offset costs of achieving and maintaining standards.
- Identify full cost of producing high-quality early care and education, including adequate staff compensation.
- Establish policy for allocation of non-tuition revenue (reduce the tuition price for all and/or grant tuition discounts based on need).
- Establish a tuition price that covers the full cost, including compensation.
- Rely on a sound need analysis methodology to allocate tuition discounts based on need.

Recommendations

Key infrastructure components and essential supports for an early care and education system

Financial aid system

- ☐ Adopt a standard application form and need analysis methodology.
- ☐ Establish financial aid administrative functions within a community-based agency.
- ☐ Establish quality and accountability standards for participating early care and education programs.

Resource and referral

- ☐ Support community agencies that provide child care resource and referral services, including consumer information about early care and education programs and quality ratings (could be co-located with financial aid agency).

Fund development and distribution

- ☐ Establish community-based or regional development offices (could be co-located with financial aid agency) that cultivates and distributes public and private funding, including:
  - Fund raising for community early care and education endowment funds and annual gifts.
  - Distribution of funds to early care and education programs that participate in the system.
  - Distribution of funds for financial aid to community-based financial aid agencies.

Standards: Licensing and accreditation

- ☐ Ensure licensing of all early care and education programs.
- ☐ Incorporate education and training requirements for early care and education practitioners (including administrators) and/or establish individual practitioner licenses.
- ☐ Establish national standards for early care and education accrediting bodies that set standards, accredit high-quality programs and monitor their compliance.

Professional development

- ☐ Support state and national career development systems that encourage, recognize and reward

professional growth for practitioners in all early care and education settings.

- Incorporate requirements in director credentials that early care and education program administrators obtain financial management training.
- Develop training for early care and education program administrators on economics and finance, including full cost analysis, pricing, accounting and salary scales.
- Develop common early care and education finance terminology to increase economic and fiscal literacy in early care and education for use in data collection, training and policy initiatives.

Data system

- Establish the infrastructure for data collection and analysis, working with states, national early care and education organizations and researchers to identify data needs and build on current data sets.
- Standardize a national data system of early care and education statistics in the National Center for Education Statistics to track data on finance and other key characteristics, using annual surveys.

Funding

- Increase current levels of funding for need-based assistance to help families pay for high-quality early care and education at levels that assure access and expand the eligibility criteria to assist all families unable to pay the full price for high-quality early care and education, as measured by the same methodology.
- Provide need-based funding for parental leave during a child's infancy as one early care and education option.
- Provide direct financial support to early care and education programs to assist them in meeting and adhering to quality criteria linked to good developmental outcomes for young children (e.g., improving compensation) while keeping the price affordable for families at all income levels.
- Dedicate public funding sources to infrastructure support for a coordinated early care and education system, including:
  - Centralized processing of a free common financial aid application.
  - Career-development opportunities, scholarships and loan forgiveness programs to develop a skilled, qualified work force for early care and education programs and support services.
  - Program accreditation.
  - Development of a national data system on early care and education finance.

Project participants

We gratefully acknowledge the contributions of the many individuals who participated in or assisted with the *Learning Between Systems* project. They are listed here by the major project component and activity in which they were involved.[1] Several people assisted in more than one capacity; however, their affiliation is noted only with the first entry below. If we have inadvertently omitted any names, please accept our apologies. Please note that participation and/or contributions to the project and this report do not necessarily constitute agreement with the findings, conclusions, or recommendations in this report.

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Jill K. Wohlford, Lumina Foundation for Education

Consultant:
Barbara J. Ash

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[1] The affiliations listed reflect those at the time of participation.
+ Assisted with seminar planning and presentations.

Endnotes

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Also available from Lumina Foundation for Education

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The primary mission of the Lumina Foundation for Education is to expand access to education by supporting research, innovative programs and communications initiatives. The Foundation focuses its work in three areas related to postsecondary education: financial access, student retention and attainment, and nontraditional learners and learning.

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